Smithsonian

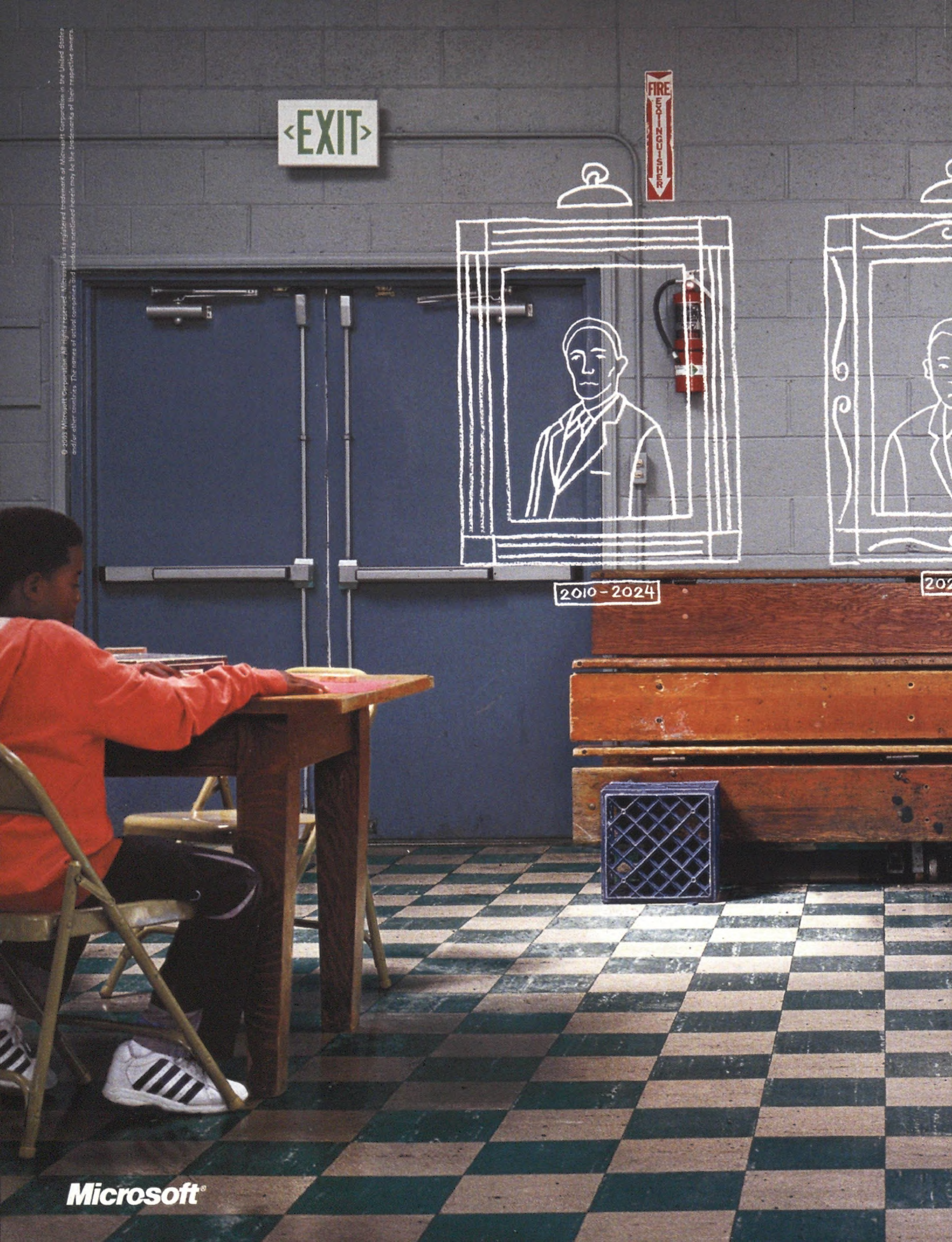
MARCH 2003

UNRAVELING THE MYSTERIES OF MACHU PICCHU

PLUS:

Saving the Big Cats
Preventing "Dirty Bombs"
Architect Daniel Libeskind
Teddy Roosevelt's Wildlife Refuges at 100

© 2003 Microsoft Corporation. All rights reserved. Microsoft is a registered trademark of Microsoft Corporation in the United States and/or other countries. The names of actual companies and products mentioned herein may be the trademarks of their respective owners.



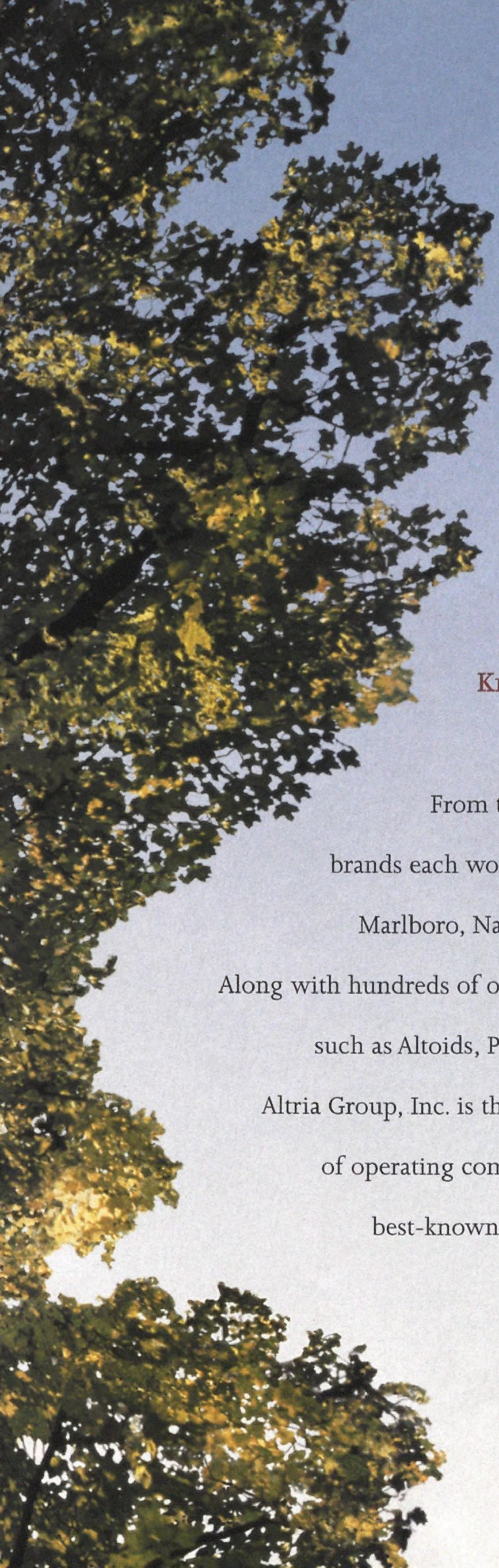
we see

a future chairman of the board.

Computer literacy helps lead to greater success in school, and more importantly, greater success in life. That's what led us to partner with Boys and Girls Clubs of America to start Club Tech. As a result, 3.3 million young people have the chance to learn to use today's technology. Because we believe that given the right tools, kids can do just about anything. microsoft.com/potential

Your potential. Our passion.

© Altria Group, Inc. 2003



What is Altria?

Altria Group, Inc. is a parent company whose roots are firmly planted in success, through years of strong financial performance and global reach.

A parent company whose branches are blue chip operating companies: Kraft Foods, Philip Morris International and Philip Morris USA.

From these branches grow many brands each worth a billion dollars or more, like Marlboro, Nabisco and Oscar Mayer.

Along with hundreds of other household names such as Altoids, Parliament, Post and Ritz.

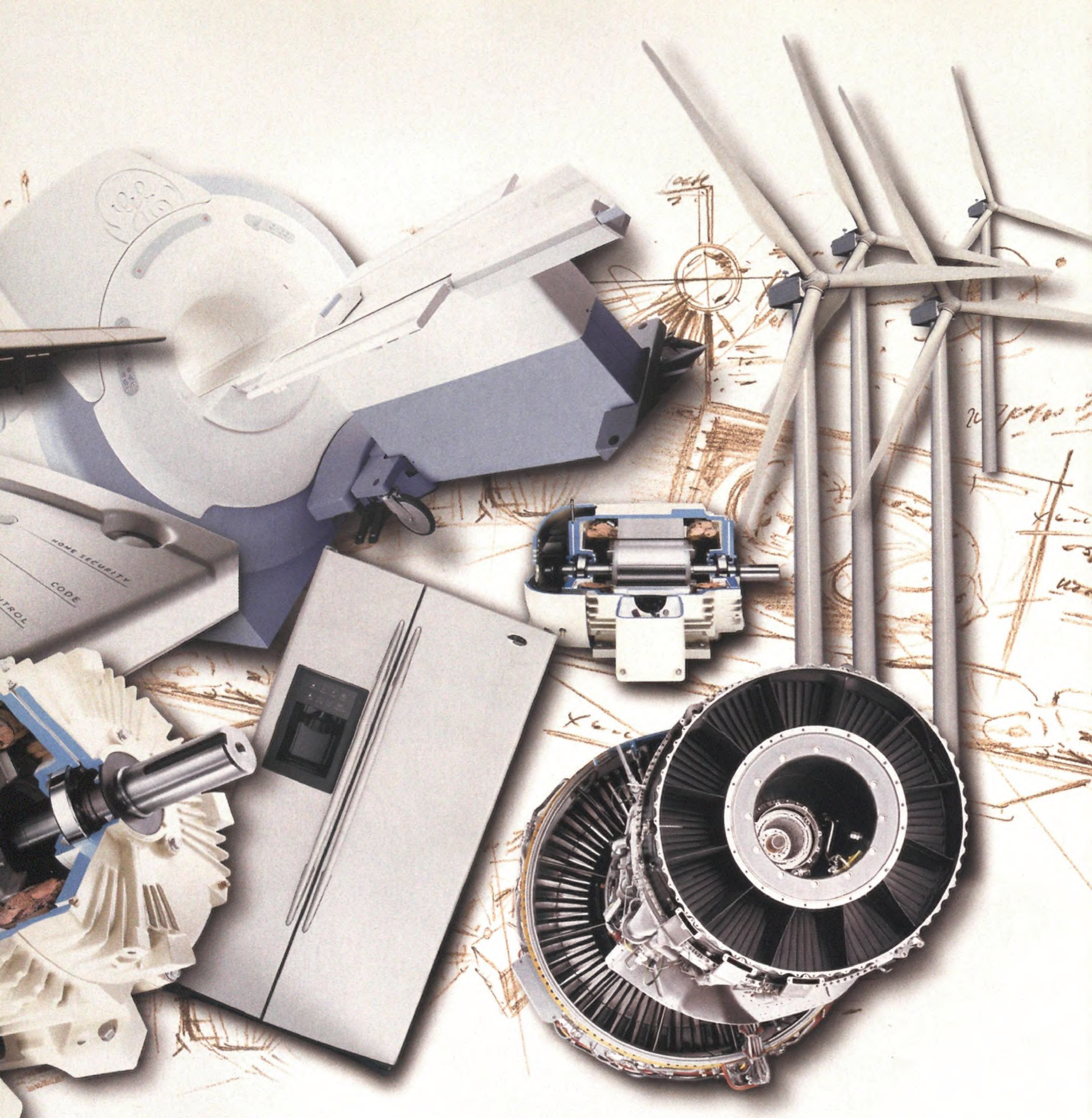
Altria Group, Inc. is the parent company of a family of operating companies, that makes the world's best-known brands.

Altria

Kraft Foods
Philip Morris International
Philip Morris USA

altria.com NYSE: MO

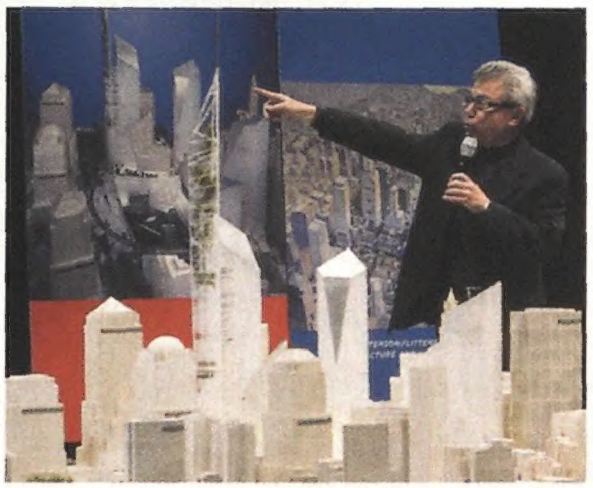
HOME CONTROL
EMERGENCY
CODE
V70



imagination at work

Smithsonian
MARCH 2003 VOLUME 33, NUMBER 12

FEATURES



76 Architect Daniel Libeskind unveiled his design for the World Trade Center site in December.

100 Can a donkey's hat be high art? Joan Miró's *La caresse d'un oiseau*, detail.

106 Until 1911, the roughly 550-year-old Machu Picchu was unknown to the outside world.

58 THE HUNT FOR HOT STUFF
"Rad rangers" in the former Soviet Union work against time, and terrorists, to locate lost radioactive materials
BY RICHARD STONE / ILLUSTRATIONS BY STEVE McCRACKEN

66 WHERE THE WILD THINGS ARE
Theodore Roosevelt, the most famous big game hunter of them all, created the nation's vast wildlife refuge system 100 years ago this month
PHOTOGRAPHS BY JOHN AND KAREN HOLLINGSWORTH

76 DANIEL LIBESKIND: ARCHITECT AT GROUND ZERO
The Polish-born Libeskind is breaking new ground with his vividly imagined designs for museums and New York City's Ground Zero
BY STANLEY MEISLER

86 ICE CAPADES
An Alaskan couple find freedom, adventure and some measure of fame as avalanche rescuers, authors and Arctic kayakers *BY MICHAEL RYAN*

90 TO THE RESCUE
More than a hundred big cats and other wild animals gain sanctuary in Arizona thanks to a Las Vegas showman turned secular Saint Francis
BY PAUL TRACHTMAN / PHOTOGRAPHS BY THOMAS MICHAEL ALLEMAN

100 MISCHIEF MAKER
A rare exhibition of Joan Miró's whimsical, brightly painted bronzes highlights the unbridled playfulness of his later works *BY STANLEY MEISLER*

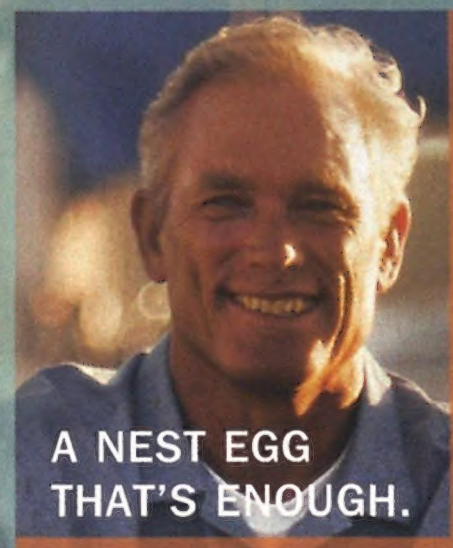
106 WINTER PALACE
Richly embellished pottery, jewelry and other treasures from Machu Picchu, on display in a new exhibition, unravel secrets of the mysterious Incan retreat
BY FERGUS M. BORDEWICH / PHOTOGRAPHS BY JEFFREY AARONSON

ON THE COVER Peru's Machu Picchu was completely overgrown when it was first discovered.
PHOTOGRAPH BY JEFFREY AARONSON

66 Crested auklets perch in safety on cliffs at the Alaska Maritime National Wildlife Refuge.

MICHAEL APPLETON / CORBIS SYGMA; DETAIL: MARK GULEZIAN; JEFFREY AARONSON / NETWORK ASPEN; JOHN & KAREN HOLLINGSWORTH

RETIREMENT



A NEST EGG
THAT'S ENOUGH.

CREDIT AND LENDING

Merrill Lynch

Depiction. The clients' name and story are fictitious and intended to be an illustration of services available through Merrill Lynch. It may not be representative of the experience of every client. Investment results may vary.
©2003 Merrill Lynch, Pierce, Fenner & Smith Incorporated. Member, SIPC. *Total Merrill, Total Merrill design, Protected Growth Investments* and *We see your financial life in total* are service marks of Merrill Lynch & Co., Inc.

WE SEE YOUR FINANCIAL LIFE IN TOTAL.℠

MY CLIENTS WANTED: To know they could maintain their lifestyle once they stop working. Richard and Maureen had been solely focused on traditional retirement vehicles.

I BROUGHT TOGETHER: Their traditional retirement plans and some innovative ideas. 401(k)s and IRAs have contribution limits. So we refinanced Richard and Maureen's mortgage and now use the newfound savings to supplement their nest egg. It's money we're putting into Protected Growth Investments℠ to try to grow their nest egg and provide some extra cushion against market volatility.

WE'RE PLANNING: A more secure future for Richard, Maureen and their boys by making all their money work together.

MY NAME IS: Ken Mirch, Merrill Lynch Financial Advisor, Beverly Hills, California.

TO MAKE YOUR MONEY WORK TOGETHER: Work with an advisor who sees your financial life in total. And makes it work in total. Call a Merrill Lynch Financial Advisor or 1-800-MERRILL. Visit www.askmerrill.ml.com

Merrill Lynch
Financial Advisor
Ken Mirch

TOTAL MERRILL℠

Smithsonian

DEPARTMENTS

49 The 5 cent Benjamin Franklin, which dates to 1847, was one of America's first stamps.

22 Margaret Bourke-White (1929) scaled many a height to get the perfect shot.

26 Native Americans and climbers are fighting over access to Cave Rock on Lake Tahoe.

32 Jupiter rising: the solar system's largest planet settles in next to a potato field near Presque Isle, Maine.

22 INDELIBLE IMAGES *Machine Dreams*
Before she ever worked for *Life* magazine, Margaret Bourke-White's early photographs elevated industry into art *BY REBECCA MAKSEL*

26 POINTS OF INTEREST *Whose Rock Is It Anyway?*
Does rock climbing trivialize Lake Tahoe's Cave Rock? The Washoe Indians, who call the area home, insist that it does
BY DAVID ROBERTS

32 PHENOMENA & CURIOSITIES *Caution, Planets Ahead*
Kevin McCartney promises the Moon, Saturn and more with his Maine Solar System Model—possibly the largest in the universe
BY SAM HOOPER SAMUELS

40 THE OBJECT AT HAND *"How-deeeee!"*
Minnie Pearl, beloved *Grand Ole Opry* fixture, doffs her hat
BY VICTORIA DAWSON

49 AROUND THE MALL *Smithsonian Institution Scenes and Sightings*
Pershing's war room map; priceless stamps; Freer's buying tour of Egypt . . .

116 PEOPLE FILE *Fare-Minded Arbiter*
Critics give the Michelin guide's new editor—a Brit! —three stars
BY RUDY CHELMINSKI

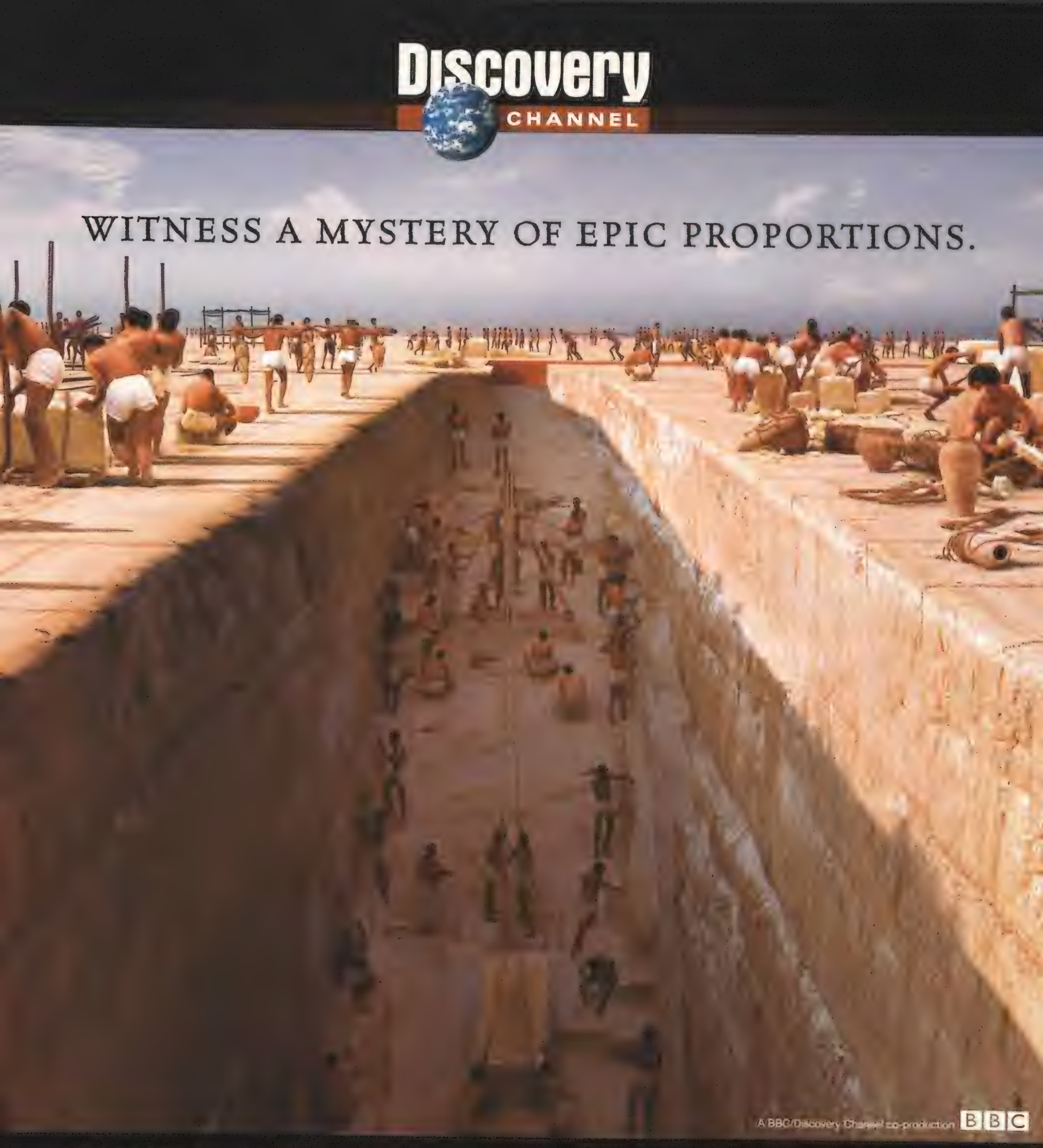
15 EDITOR'S NOTE *Stanley Meisler hits a stand-up double*
16 FROM THE SECRETARY *The Big Picture*
18 LETTERS *Shadow Wolves; stuffed hippos; haiku history . . .*
56 JUST LOOKING *Sweet Sorrow*
120 BOOKS *Henry Kissinger on Vietnam*
128 THE LAST PAGE *Once Upon a Time*

VISIT SMITHSONIAN MAGAZINE ON-LINE. For further reading on our story topics, more images from our photographers, listings of events and exhibitions at the museums, information on Smithsonian Journeys Educational Travel, or to join our popular readers' panel, visit **WWW.SMITHSONIANMAG.COM**

NATIONAL POSTAL MUSEUM, SMITHSONIAN INSTITUTION; RALPH STEINER / MARGARET BOURKE-WHITE COLLECTION, SYRACUSE UNIVERSITY LIBRARY; GREG EPPERSON; JAN KOK

Discovery CHANNEL

WITNESS A MYSTERY OF EPIC PROPORTIONS.



A BBC/Discovery Channel co-production BBC

AN EGYPTIAN CONSCRIPT TELLS THE TALE OF AN ANCIENT WONDER.

BUILDING THE GREAT PYRAMID

SUNDAY, MARCH 2
9PM E/P

Play the Mummy Maker game at **discovery.com**

sponsored by: MasterCard MorganStanley

© 2003 DCI

Alaska
Asia & Pacific
Canada
Caribbean
Europe
Hawaii
Mexico
Panama Canal
South America
World Voyage

WHY LEARN A FOREIGN LANGUAGE WHEN YOU'LL JUST SPEND THE WHOLE TRIP SPEECHLESS.

Just off the bow, enchanted landscapes reveal themselves in breathtaking ways—often spectacular, sometimes sublime, always unforgettable. This is the world as interpreted by Holland America. Where you'll sail in exquisite five-star comfort. With service so supremely intuitive, you may just find all your needs answered, without uttering so much as a word.

CALL YOUR TRAVEL AGENT OR 1-877-SAIL HAL EXT 762 WWW.HOLLANDAMERICA.COM

Holland America

Smithsonian

www.smithsonianmag.com

EDITOR
Carey Winfrey

ART DIRECTOR
Brian Noyes

EXECUTIVE EDITORS
Terence Monmaney
Susan West

MANAGING EDITOR
Sally Scott Maran

SENIOR EDITORS
Diane M. Bolz
Kathleen M. Burke
Marlane A. Liddell
John F. Ross

PICTURE EDITOR
Bonnie Stutski

COPY CHIEF
Karen Larkins

ASSOCIATE EDITORS
Bruce Hathaway
Marian Smith Holmes
Alison C. McLean
Lucinda Moore
Beth Py-Lieberman

COPY EDITOR
Rebecca Maksel

ASSOCIATE ART DIRECTOR
Erik K. Washam

ASSOCIATE PICTURE EDITOR
Molly Roberts

ASSISTANT EDITORS
Elizabeth J. Erskine
Lyn Garrity
Valerie Jablow
Angela M. Pleasants
Helen E. Starkweather

PICTURE DEPARTMENT MANAGER
Carrie Diane Cole

ASSISTANT PICTURE EDITOR
Nell Whiting

ASSISTANT TO THE EDITOR
Andrea Georgiou

EDITORIAL ASSISTANTS
Michelle L. Strange
Chai N. Woodham

READER SERVICES
Karla A. Henry
Carolyn McGhee

EDITORIAL OFFICES:
MRC 951, Washington, DC
20013-7012
(202) 275-2000

SUBSCRIPTIONS:
(800) 766-2149
P.O. Box 420312
Palm Coast, FL 32142-0312
www.smithsonianmag.com
Outside the United States:
(386) 447-2721

Sorry, but SMITHSONIAN cannot assume responsibility for unsolicited materials.

SMITHSONIAN BUSINESS VENTURES
Gary M. Beer, CHIEF EXECUTIVE OFFICER
Elaine Gill, EXECUTIVE ASSISTANT

BOARD OF DIRECTORS
M. Ronald Ruskin, CHAIRMAN
Donald J. Steiner, VICE CHAIRMAN
Gary M. Beer, John R. Dailey,
Thomas M. Kenney, Alice Maroni,
Adolfo Marzol, Anthony Welters

PUBLISHER
Amy P. Wilkins

GENERAL MANAGER
David R. Kefford

ADVERTISING
Thomas M. Huber, ASSOCIATE PUBLISHER
Thomas Madden, NEW YORK MANAGER
Caryl Heard, SALES DEVELOPMENT MANAGER
Marilyn Cruz, ADVERTISING SERVICES MANAGER
ACCOUNT MANAGERS
NEW YORK: Lisa Bianco, Gerry Kiernan, Meryle Lowenthal, Jill Reid Mullan SOUTHEAST: Byron Brown, Suzanne Cooper, Judy Robinson MIDWEST: Dick Opfer, Bill Milligan, Mark Rosenbaum, Karen Koller DETROIT: Don Heth, James McNulty, Michael Peters, Jill Severini SAN FRANCISCO: Charles E. Schmuck, Linda Bowers, Bridget Pivonka, Shirley Read-Jahn LOS ANGELES: Gary Thompson, Martha Quigley, Cheryl Smith, Randi Swerski AUSTRALIA: Jake Wilson CANADA: Bob Dodd CARIBBEAN/MEXICO/SOUTH AMERICA/ CENTRAL AMERICA: Al Nadal HONG KONG: Heather Riley JAPAN: Simon R. Timmis UNITED KINGDOM: Ken Melville

ADVERTISING ASSISTANTS
Neal Charles, Christopher Tedrick

MARKETING
Diane Lowman, DIRECTOR
Kelly Cannon, ASSOCIATE MARKETING DIRECTOR
Renée Martin, ART DIRECTOR
Andrew Grant, PROMOTION MANAGER
Kristin Ott, MANAGER
Lisa Van Dyne, COORDINATOR
Julia Coney, COORDINATOR

RESEARCH
Renée Mitchell, DIRECTOR
Marilyn Resciniti, MANAGER
Katherine Madson, JUNIOR ANALYST

CONSUMER MARKETING
Scott I. Rockman, VICE PRESIDENT
Lisa Dunham, CIRCULATION DIRECTOR
Elizabeth M. Hopkins, PLANNING DIRECTOR
Andrea Sole, FULFILLMENT DIRECTOR
Donald G. Dodd, FORECAST MANAGER
Suzanne L. Eng, PURCHASING MANAGER
Rosemary Sweeney, RETENTION MANAGER
Yvonne Alvarez, MEMBERSHIP SERVICES COORDINATOR
Nelson Santiago, ADMINISTRATIVE ASSISTANT
Amity Boone, RENEWALS MARKETING COORDINATOR

PRODUCTION
Greg Williams, DIRECTOR
Katherine Balch, ADVERTISING PRODUCTION MANAGER
Rachel L. Gilmore, DIGITAL ADVERTISING COORDINATOR
Sarah Kingsley, DIRECTOR OF MANUFACTURING
David Sterling, PREPRESS MANAGER
Rahsaan J. Jackson, PRODUCTION ASSISTANT

BUSINESS OFFICE
Myrian Mora, EXECUTIVE ADMINISTRATOR
Valerie Martin, ADVERTISING SYSTEMS DIRECTOR
Shelia Brannum, ADVERTISING BILLING/COLLECTIONS MANAGER
Michael Pollock, ADVERTISING SYSTEMS MANAGER
Lawrence Sirna, ACCOUNTS PAYABLE/GENERAL LEDGER MANAGER
John Comer, ACCOUNTING SPECIALIST

WEB DEVELOPMENT
Michelle A. McMahon, DIRECTOR
Angela Render, NEW MEDIA EDITORIAL ASSISTANT
Patrick Q. Woods, NEW MEDIA/WEB ADMINISTRATOR

ASSISTANT TO THE PUBLISHER
Edward J. Hayes

PUBLISHER EMERITUS
Joseph J. Bonsignore

MAIN ADVERTISING OFFICE:
420 Lexington Avenue, Suite 2335
New York, NY 10170
(212) 490-2510

© 2003 Lands' End, Inc.

Shop the Lands' End way: 1-800-960-9421, landsend.com and select Sears stores.

40 YEARS YOUNG

Smithsonian Institution

SECRETARY OF THE SMITHSONIAN INSTITUTION
Lawrence M. Small

BOARD OF REGENTS

The Chief Justice of the United States, CHANCELLOR

Vice President of the United States, Richard B. Cheney

Hon. Thad Cochran
Hon. Bill Frist
Hon. Patrick J. Leahy
Hon. Sam Johnson
Hon. Robert T. Matsui
Hon. Ralph Regula
Hon. Barber B. Conable, Jr.
Ms. Anne d'Harnoncourt
Dr. Hanna H. Gray
Dr. Manuel L. Ibáñez
Dr. Walter E. Massey
Mr. Roger W. Sant
Mr. Alan G. Spoon
Ms. Patricia Q. Stonesifer
Mr. Wesley S. Williams, Jr.

SMITHSONIAN NATIONAL BOARD

Mr. Frank A. Daniels, Jr., CHAIR
Mrs. Patricia Frost, Mr. Henry R. Muñoz III, Mr. David M. Silfen, VICE CHAIRS

NATIONAL BOARD: Mrs. Claudia Ream Allen, Mr. Kenneth E. Behring, Mr. L. Hardwick Caldwell III, Mr. Richard O. Campbell, Mrs. Jean Case, Mr. Pete Claussen, Ms. Laurel Cutler, Mr. George A. Didden III, Mr. Robert G. Donnelley, Mr. Archie W. Dunham, Mrs. Jane B. Eisner, Mr. Stephen Hamblett, Mr. Frederic C. Hamilton, Mrs. Susan W. Hammer, Mr. Michael R. Haverty, Mr. John E. Herzog, Mrs. Edna Jones,* Mrs. Dorothy G. Lemelson, Dr. Frank H. Levinson, Mr. Peter H. Lunder, Mrs. Elizabeth S. MacMillan, Mrs. Holly Madigan, Mr. Frank Martucci, Mr. Edgar M. Masinter, Ms. Amy Sarah McCombs, Mr. Augustus C. Miller, Mr. Kenneth B. Miller, Mr. Howard P. Milstein, Mr. Charles H. Moore, Mrs. Susan Reed Moseley, Mrs. Mary Ourisman, Mr. Paul L. Peck, Mr. S. Davis Phillips, Mr. Thomas F. Pyle, Jr., Mrs. Catherine B. Reynolds, Ms. Susan Lynch Ruddy, Mr. Richard T. Schlosberg III, Hon. Rodney E. Slater, Mrs. Helen Spaulding, Mr. Daniel W. Yohannes

HONORARY MEMBERS: Mr. Robert Mc C. Adams, Mr. William S. Anderson, Hon. Max N. Berry, Mr. Richard P. Cooley, Mr. Joseph F. Cullman 3rd, Mr. Charles D. Dickey, Jr., Mr. Alfred C. Glassell, Jr., Mr. I. Michael Heyman, Mr. James M. Kemper, Jr., Mrs. Jean B. Mahoney, Hon. George C. McGhee, Justice Sandra D. O'Connor, Mr. Francis C. Rooney, Jr., Mr. Wilbur L. Ross, Jr., Mr. Lloyd G. Schermer, Hon. Frank A. Weil, Mrs. Gay F. Wray

* Ex-Officio

Stan the Man

Stanley Meisler hits a stand-up double

BY CAREY WINFREY

AS A GENERAL RULE, magazine editors don't like to run more than one article by any one writer in the same issue. That goes for us, too, but this time we couldn't help ourselves. Stanley Meisler's story about Daniel Libeskind ("Daniel Libeskind: Architect at Ground Zero," p. 76) is too timely to hold: in early February his design for the World Trade Center site was selected as a finalist. And Meisler's piece about the playful, painted bronzes of sculptor Joan Miró ("Mischief Maker," p. 100) was just the thing—also timely, colorful, upbeat—to round out the issue.

Joan Miró (top, in 1974) and Daniel Libeskind (above, 2001): High points of a 47-year career.

JAMES A. SUGAR / CORBIS; PETER MARLOW / MAGNUM PHOTOS

Meisler, for his part, regards his interviews with Miró, who died in 1983, and Libeskind as two of the high points of his 47-year journalism career, much of it as a foreign correspondent in Europe for the *Los Angeles Times*. "Miró was then the most famous living artist in the world," Meisler recalls of meeting him in 1978, "but he seemed to have no pretense. He gestured as he spoke, punching a fist into the air or slamming a foot on the ground. He smiled and laughed, kept saying how much he liked the United States and had only kind things to say about everyone." Except artist Salvador Dalí. When Meisler asked him about Dalí, who had not only supported the Spanish dictator Francisco Franco but had come to parody himself as his work grew ever more commercial, Miró said pointedly: "I admired the *young* Dalí."

During an interview, Meisler likes to say as little as possible to encourage the subject to talk as much as possible. But interviewing Daniel Libeskind in Berlin for us some months ago, Meisler went on almost as much as Libeskind. "Mostly this stemmed from Libeskind's personality," says Meisler. "He is an amiable artist who seems not to be blinded by his own ego and has an insatiable curiosity."

Subject and interviewer turned out to have a lot in common. Both have family roots in eastern Poland. Both went to high school in the Bronx. Both had relatives who were sent to the Auschwitz death camp in World War II. As those coincidences and others kept coming up, Libeskind peppered the conversation with cries of "amazing" and "strange world."

When Meisler met Libeskind again a few weeks ago in New York City, the journalist was determined to "behave more professionally. But I failed. After he answered all my questions about his proposed design for the World Trade Center, he asked me about my children. [Meisler has six ranging in age from 25 to 39.] I could not resist replying at length, and the two of us were soon chatting away." ○

The Big Picture

Our photographic collections showcase the world from the seafloor to the stars above

WHAT THE COMPUTER has been to our time, what the printing press was to an earlier age, still photography was to the 19th century—a technological innovation of startling power. Photography brought the remote world close and made it possible for people to see what they might otherwise never have seen. To this day, we live under the enchantment of the camera's image.

The history of photography and the history of the Smithsonian do not quite coincide, but they come close. The Institution was established in 1846, less than a decade after photographic pioneers Louis-Jacques-Mandé Daguerre and William Henry Fox Talbot announced their separate processes. Daguerre produced images on silver-coated copper plates (daguerreotypes); Talbot made positive and negative prints on paper. Early on, the new technology took note of the new Institution: there is in our collections an 1846 daguerreotype of the architect's model of the Smithsonian Castle. Researchers, in turn, used the camera to advance the Institution's mission, documenting everything from the variety of species to the variety of the American landscape.

In so doing, they often enhanced the documentary record. The images were not simply accurate; they were beautiful. Intended as authoritative history, they took on the additional authority of art. Though the primary purpose of the first color photograph of the solar spectrum, taken in 1908, was scientific, the result resembles nothing so much as a brilliant abstract painting from mid-century. In fact, there's artistry in the most utilitarian of the photographic holdings we've compiled over the past century and a half. Those holdings—more than 13 million photographs in some 700 collections distributed among our facilities—are extraordinarily varied, and they continue to grow. The Center for Earth and Planetary Studies, for example, gathers digital images downloaded from a satellite orbiting Mars. Indeed, photography in all its functions—as record, document, surrogate specimen, artistic statement—is nowhere more broadly represented than at the Smithsonian. It's only fitting, then, that we should now be seeking funds to establish a Smithsonian Center for Photography, not to replace what individual units do with their photos but to extend their capacity to use and display them. The center will be, in part, a spacious portal to the collections, allowing easier access to the riches they contain.

Russell Aikins shed light on a steel mill worker, c. 1940.

The extent of those riches will be apparent this fall with the opening—on the Mall, on-line, and in a sumptuous companion volume from Smithsonian Books—of a historic exhibition, "At First Sight." The show is to feature a selection of images gathered from throughout the Institution, and their variety and beauty are likely to be a revelation to viewers. A revelation, too, will be the vivid manner of their presentation: not only in mats and frames but also through ingenious technologies such as back projection and plasma screens. Best of all, for those who find what's on display an inducement to see even more, interactive technology will allow unprecedented exploration of the a-to-z range and earth-to-the-heavens reach of the collections.

In celebrating the distinction of our particular collections, "At First Sight" will celebrate as well an abiding human fascination with photography. Through its momentary attention, a camera can fix indelibly in our minds a place, a person, an event. Photographs are set in time, and yet over time they accrue a wealth of additional resonance. To images from the past, we bring the future, and a larger response than they could ever have evoked when new. In the 19th century, for example, American Indians who journeyed to Washington to sign treaties had their pictures taken. Some sat for the photos wearing westernized clothes, some wore tribal dress, some mixed the two. Into those plain pictures, we now cannot help but read a complex, painful history of adjustment and loss. The old images ignite a string of new images in the mind and make photographers of us all.

Lawrence M. Small
SECRETARY OF THE SMITHSONIAN INSTITUTION

RUSSELL AIKINS / DIVISION OF THE HISTORY OF TECHNOLOGY, NATIONAL MUSEUM OF AMERICAN HISTORY, SI

six "my grandparents went to the Grand Canyon and all I got was this crappy tee shirt" tee shirts: $45

road atlas: $14

being grandparents, not last-minute babysitters: priceless

© 2003 MasterCard International Incorporated

cash advances. ATM locators. replacement of lost or stolen cards. 24/7 with MasterCard Global Service.℠ **call 1-800-mastercard.**

there are some things money can't buy. for everything else there's MasterCard.®

MasterCard

Readers respond to the January issue:

NOVA SCOTIA'S CENTENARIANS

I JUMPED for joy when I read "Puzzle of the Century," about Nova Scotia's centenarians. My family is riddled with them. One great-great-grandmother, who had typhoid fever when she was 80, lived another 20 years and, it was said, smoked her pipe to the end. My great-aunt spent her life in New Glasgow, where the air was enriched by residue from a steel mill and coal mines. Exercise was knitting, bridge playing and politicking for the Tories, and there were always lots of cakes at tea and gobs of butter for the scones. So, the rules for a long life are: stay away from salad, green vegetables, treadmills, running shoes and clean air. And arrange to live most of your life in Nova Scotia.

SHEILAH S. SWEET
LENOX, MASSACHUSETTS

I WOULD be willing to bet that all of Nova Scotia's 100-year-olds could tell you that the pretty seaside town pictured on p. 73 is Lunenburg, not Peggy's Cove, as the caption indicates. Lunenburg—a UNESCO World Heritage Site, home to the Fisheries Museum of the Atlantic and birthplace of the *Bluenose* schooner shown on the Canadian dime—celebrates its 250th anniversary this summer.

CECILY HONIG
HALIFAX, NOVA SCOTIA

Lunenburg it is, as most of Nova Scotia—young and old—have let us know.—Ed.

An all-Indian Customs unit—possibly the world's best trackers—uses time-honored techniques to pursue smugglers along a remote stretch of the U.S.-Mexico border
SHADOW WOLVES
Smithsonian
A Fresh Look at the Great Depression
Alexander Hamilton Goes to War
Nova Scotia Centenarians – Is it the Water?
Kofi Annan: Cool Hand at the U.N.
Tracking Drug Smugglers, Indian Style
Dubrovnik: Europe's Best-Kept Secret

BORDER CRIMES

"SHADOW WOLVES," about the all-Indian U.S. Customs unit that uses native tracking techniques to intercept drug smugglers crossing the Mexican border into Texas, was impressive. However, the deaths of 76 undocumented aliens in the desert and the fact that the smuggler's best job opportunity at home paid $20 a week speaks to me of greater crimes than marijuana smuggling. If only our war on poverty were fought with as much enthusiasm and bravado.

CHARLES HOREY
BOSTON, MASSACHUSETTS

NEXT STOP, OBSOLESCENCE

THE PICTURE of the Burlington *Zephyr* in "Amazing Grace," about Depression-era photographs, brought back memories. In 1934, the *Zephyr* broke the world's speed record for a long-distance run, traveling up to 112 miles per hour between Denver and Chicago and attracting huge crowds along the way. [For more about the train, visit www.msichicago.org/exhibit/zephyr.] Many times I rode the *Zephyr* to Chicago. After a pleasant two-hour ride, I was at Union Station near downtown Chicago. Now we must drive to the airport and arrive two hours before boarding a plane. We fly cramped in our seats for a half hour, and when we land we are still an hour from downtown. The same trip takes longer today than it did 60 years ago. That's progress?

DONALD R. MOSER
GUTTENBERG, IOWA

HAIKU HISTORY GAP FILLED

I NOTICED with dismay that the article "Haiku History" went from ancient Rome almost through the Renaissance without pausing in between. Here are a few verses I've composed with which to fill the gap:

William the Bastard
invades, wins—Tapestry at
eleven for more.

Mother and father,
siblings perish overnight
in the great plague. Rats!

Bad King John is crowned.
Bad, bad, bad! Magna Carta
will straighten him out.

NICK FRIEND
SOUTH BOSTON, MASSACHUSETTS

HAMILTON'S LAST SHOT

"HAMILTON Takes Command" reminded me of the article in the November 1976 issue of SMITHSONIAN

SMITHSONIAN (JANUARY 2003) (2); BOTTOM: SKY SHOTS, CHESTER N.S

I thought diet and exercise were enough to lower my cholesterol. Turned out I needed more.

Now I take my family history of high cholesterol and heart disease a lot more seriously. Because even though I was doing everything right, my cholesterol was still too high, and I had a heart attack. As I was recovering, I asked my doctor about adding ZOCOR. He said ZOCOR, along with a healthy diet and exercise, could really lower cholesterol. And it's working. Now my cholesterol is right where it should be. And so am I.

ZOCOR is an effective medicine that along with diet and exercise can significantly lower total cholesterol. A clinical study among people with high cholesterol and heart disease found 42% fewer deaths from heart attack among those taking ZOCOR.* One tablet, taken once a day, can help people with high cholesterol and heart disease live longer, healthier lives.

Important considerations: ZOCOR is a prescription medicine and isn't right for everyone, including women who are nursing or pregnant or who may become pregnant, anyone with liver problems, and people who are allergic to any ingredients of ZOCOR. Unexplained muscle pain or weakness could be a sign of a rare but serious side effect and should be reported to your doctor right away. Your doctor may do blood tests before and during treatment with ZOCOR to check for liver problems. To avoid serious side effects, discuss with your doctor medicine or food you should avoid while on ZOCOR (see details immediately following this ad).

Ask your doctor if ZOCOR is right for you. For more information and the free *Guide for Managing High Cholesterol*, call 1-888-MERCK-68 or visit *zocor.com*.

ZOCOR. More than 10 years of experience and 140 million prescriptions filled.

YOUR RESULTS MAY VARY.

PLEASE READ THE ADDITIONAL INFORMATION ABOUT ZOCOR IMMEDIATELY FOLLOWING THIS AD.

*42% reduction based on 111/2,221 (ZOCOR) vs 189/2,223 (placebo).

ZOCOR is a registered trademark of Merck & Co., Inc.

MERCK

© 2002 Merck & Co., Inc. All rights reserved

20207556[1]|442C|ZOC-CON

patient assistance program

To find out if you qualify, call 1-888-MERCK-68

ZOCOR (SIMVASTATIN)

It's your future. Be there.

ZOCOR®
(SIMVASTATIN)

PLEASE READ THIS SUMMARY CAREFULLY, AND THEN ASK YOUR DOCTOR ABOUT ZOCOR. NO ADVERTISEMENT CAN PROVIDE ALL THE INFORMATION NEEDED TO PRESCRIBE A DRUG. THIS ADVERTISEMENT DOES NOT TAKE THE PLACE OF CAREFUL DISCUSSIONS WITH YOUR DOCTOR. ONLY YOUR DOCTOR HAS THE TRAINING TO WEIGH THE RISKS AND BENEFITS OF A PRESCRIPTION DRUG FOR YOU.

USES OF ZOCOR

ZOCOR is a prescription drug that is indicated as an addition to diet for many patients with high cholesterol when diet and exercise are inadequate. For patients with coronary heart disease (CHD) and high cholesterol, ZOCOR is indicated as an addition to diet to reduce the risk of death by reducing coronary death; to reduce the risk of heart attack; to reduce the risk for undergoing cardiac procedures (coronary artery bypass grafting and percutaneous transluminal coronary angioplasty); and to reduce the risk of stroke or transient ischemic attack (TIA).

WHEN ZOCOR SHOULD NOT BE USED

Some people should not take ZOCOR. Discuss this with your doctor.

ZOCOR should not be used by patients who are allergic to any of its ingredients. In addition to the active ingredient simvastatin, each tablet contains the following inactive ingredients: cellulose, lactose, magnesium stearate, iron oxides, talc, titanium dioxide, and starch. Butylated hydroxyanisole is added as a preservative.

Patients with liver problems: ZOCOR should not be used by patients with active liver disease or repeated blood test results indicating possible liver problems. (See WARNINGS.)

Women who are or may become pregnant: Pregnant women should not take ZOCOR because it may harm the fetus. **Women of childbearing age should not take ZOCOR unless it is highly unlikely that they will become pregnant.** If a woman does become pregnant while on ZOCOR, she should stop taking the drug and talk to her doctor at once.

Women who are breast-feeding should not take ZOCOR.

WARNINGS

Muscle: Tell your doctor right away if you experience any unexplained muscle pain, tenderness, or weakness at any time during treatment with ZOCOR so your doctor can decide if ZOCOR should be stopped. Some patients may have muscle pain or weakness while taking ZOCOR. Rarely, this can include muscle breakdown resulting in kidney damage. The risk of muscle breakdown is greater in patients taking certain other drugs along with ZOCOR:

- **Cyclosporine, itraconazole, ketoconazole, erythromycin, clarithromycin, HIV protease inhibitors, the antidepressant nefazodone, or large quantities of grapefruit juice (>1 quart daily), particularly with higher doses of ZOCOR.**
- **Gemfibrozil, other fibrates, or lipid-lowering doses (≥1 g/day) of niacin, particularly with higher doses of ZOCOR.**
- **Amiodarone or verapamil with higher doses of ZOCOR.**

The risk of muscle breakdown is greater at higher doses of simvastatin.

Because the risk of muscle side effects is greater when ZOCOR is used with the products listed above, the combined use of these products should be avoided unless your doctor determines the benefits are likely to outweigh the increased risks.

If your doctor determines that the benefits of combined use of ZOCOR with gemfibrozil, other fibrates, or niacin likely outweigh the increased risk of muscle problems, the dose of ZOCOR should not exceed 10 mg daily. No more than 10 mg/day of ZOCOR should be taken with cyclosporine.

The combined use of verapamil or amiodarone with doses above ZOCOR 20 mg should be avoided unless your doctor determines the benefits outweigh the increased risk of muscle breakdown.

Your doctor should also carefully monitor for any muscle pain, tenderness, or weakness, particularly during the initial months of therapy and if the dose of either drug is increased. Your doctor also may monitor the level of certain muscle enzymes in your body, but there is no assurance that such monitoring will prevent the occurrence of severe muscle disease.

The risk of muscle breakdown is greater in patients with kidney problems or diabetes.

If you have conditions that can increase your risk of muscle breakdown, which in turn can cause kidney damage, your doctor should temporarily withhold or stop ZOCOR. Also, since there are no known adverse consequences of briefly stopping therapy with ZOCOR, treatment should be stopped a few days before elective major surgery and when any major acute medical or surgical condition occurs. Discuss this with your doctor, who can explain these conditions to you.

Liver: About 1% of patients who took ZOCOR in clinical trials developed elevated levels of some liver enzymes. *Patients who had these increases usually had no symptoms.* Elevated liver enzymes usually returned to normal levels when therapy with ZOCOR was stopped.

In the ZOCOR Survival Study, the number of patients with more than 1 liver enzyme level elevation to greater than 3 times the normal upper limit was no different between the ZOCOR and placebo groups. Only 8 patients on ZOCOR and 5 on placebo discontinued therapy due to elevated liver enzyme levels. Patients were started on 20 mg of ZOCOR, and one third had their dose raised to 40 mg.

Your doctor should perform routine blood tests to check these enzymes before you start treatment with ZOCOR and periodically thereafter (for example, semiannually) for your first year of treatment or until 1 year after your last elevation in dose. Patients titrated to the 80-mg dose should receive an additional test at 3 months. If your enzyme levels increase, your doctor should order more frequent tests. If your liver enzyme levels remain unusually high, your doctor should discontinue your medication.

Tell your doctor about any liver disease you may have had in the past and about how much alcohol you consume. ZOCOR should be used with caution in patients who consume large amounts of alcohol.

PRECAUTIONS

Before starting treatment with ZOCOR, try to lower your cholesterol by other methods such as diet, exercise, and weight loss. Ask your doctor about how best to do this. Any other medical problems that can cause high cholesterol should also be treated.

Drug Interactions: Because of possible serious drug interactions, it is important to tell your doctor what other drugs you are taking, including those obtained without a prescription. You should also tell other doctors who are prescribing a new medicine for you that you are taking ZOCOR® (simvastatin).

ZOCOR can interact with the following:

- Itraconazole
- Ketoconazole
- Erythromycin
- Clarithromycin
- HIV protease inhibitors
- Nefazodone
- Cyclosporine
- Large quantities of grapefruit juice (>1 quart daily)

The risk of myopathy is also increased by the following lipid-lowering drugs that can cause myopathy when given alone:

- Gemfibrozil
- Other fibrates
- Niacin (nicotinic acid) (≥1 g/day)

The risk of muscle breakdown is increased with other drugs:

- Amiodarone
- Verapamil

Some patients taking lipid-lowering agents similar to ZOCOR and coumarin anticoagulants (a type of blood thinner) have experienced bleeding and/or increased blood clotting time. Patients taking these medicines should have their blood tested before starting therapy with ZOCOR and should continue to be monitored.

Central Nervous System Toxicity; Cancer, Mutations, Impairment of Fertility: Like most prescription drugs, ZOCOR was required to be tested on animals before it was marketed for human use. Often these tests were designed to achieve higher drug concentrations than humans achieve at recommended dosing. In some tests, the animals had damage to the nerves in the central nervous system. In studies of mice with high doses of ZOCOR, the likelihood of certain types of cancerous tumors increased. No evidence of mutations of or damage to genetic material has been seen. In 1 study with ZOCOR, there was decreased fertility in male rats.

Pregnancy: Pregnant women should not take ZOCOR because it may harm the fetus.

Safety in pregnancy has not been established. In studies with lipid-lowering agents similar to ZOCOR, there have been rare reports of birth defects of the skeleton and digestive system. Therefore, women of childbearing age should not take ZOCOR unless it is highly unlikely they will become pregnant. If a woman does become pregnant while taking ZOCOR, she should stop taking the drug and talk to her doctor at once. The active ingredient of ZOCOR did not cause birth defects in rats at 3 times the human dose or in rabbits at 3 times the human dose.

Nursing Mothers: Drugs taken by nursing mothers may be present in their breast milk. Because of the potential for serious adverse reactions in nursing infants, a woman taking ZOCOR should not breast-feed. (See WHEN ZOCOR SHOULD NOT BE USED.)

Pediatric Use: ZOCOR is not recommended for children or patients under 20 years of age.

Geriatric Use: Higher blood levels of active drug were seen in elderly patients (70–78 years of age) compared with younger patients (18–30 years of age) in 1 study. In other studies, the cholesterol-lowering effects of ZOCOR were at least as great in elderly patients as in younger patients, and there were no overall differences in safety between elderly and younger patients over the 20–80 mg/day dosage range.

SIDE EFFECTS

Most patients tolerate treatment with ZOCOR well; however, like all prescription drugs, ZOCOR can cause side effects, and some of them can be serious. Side effects that do occur are usually mild and short-lived. Only your doctor can weigh the risks versus the benefits of any prescription drug. In clinical studies with ZOCOR, less than 1.5% of patients dropped out of the studies because of side effects. In a large, long-term study, patients taking ZOCOR experienced similar side effects to those patients taking placebo (sugar pills). Some of the side effects that have been reported with ZOCOR or related drugs are listed below. This list is not complete. Be sure to ask your doctor about side effects before taking ZOCOR and to discuss any side effects that occur.

Digestive System: Constipation, diarrhea, upset stomach, gas, heartburn, stomach pain/cramps, anorexia, loss of appetite, nausea, inflammation of the pancreas, hepatitis, jaundice, fatty changes in the liver, and, rarely, severe liver damage and failure, cirrhosis, and liver cancer.

Muscle, Skeletal: Muscle cramps, aches, pain, and weakness; joint pain; muscle breakdown.

Nervous System: Dizziness, headache, insomnia, tingling, memory loss, damage to nerves causing weakness and/or loss of sensation and/or abnormal sensations, anxiety, depression, tremor, loss of balance, psychic disturbances.

Skin: Rash, itching, hair loss, dryness, nodules, discoloration.

Eye/Senses: Blurred vision, altered taste sensation, progression of cataracts, eye muscle weakness.

Hypersensitivity (Allergic) Reactions: On rare occasions, a wide variety of symptoms have been reported to occur either alone or together in groups (referred to as a syndrome) that appeared to be based on allergic-type reactions, which may rarely be fatal. These have included 1 or more of the following: a severe generalized reaction that may include shortness of breath, wheezing, digestive symptoms, and low blood pressure and even shock; an allergic reaction with swelling of the face, lips, tongue, and/or throat with difficulty swallowing or breathing; symptoms mimicking lupus (a disorder in which a person's immune system may attack parts of his or her own body); severe muscle and blood vessel inflammation, sometimes including rash; bruises; various disorders of blood cells (that could result in anemia, infection, or blood clotting problems) or abnormal blood tests; inflamed or painful joints; hives; fatigue and weakness; sensitivity to sunlight; fever, chills; flushing; difficulty breathing; and severe skin disorders that vary from rash to a serious burn-like shedding of skin all over the body, including mucous membranes such as the lining of the mouth.

Other: Loss of sexual desire, breast enlargement, impotence.

Laboratory Tests: Liver function test abnormalities including elevated alkaline phosphatase and bilirubin; thyroid function abnormalities.

NOTE: This summary provides important information about ZOCOR. If you would like more information, ask your doctor or pharmacist to let you read the prescribing information and then discuss it with them.

ZOCOR is a registered trademark of Merck & Co., Inc.

MERCK
Whitehouse Station, NJ 08889

©2002 Merck & Co., Inc. All rights reserved.

20207556(1)(442C)-ZOC-CON

SMITHSONIAN
INSITES
www.smithsonianmag.si.edu
The advertisers listed below invite you to connect with them on the World Wide Web for additional information about their products and services.

ADM
THE NATURE OF WHAT'S TO COME™
www.admworld.com

BRITAIN
www.visitbritain.com/usa3

California
FIND YOURSELF HERE
www.visitcalifornia.com

Energizer e²
www.energizer-e2.com

Expedia.com
Don't just travel. Travel Right.™
www.expedia.com

Glenfiddich
www.glenfiddich.com

Holland America
www.hollandamerica.com

LANDS' END
www.landsend.com

MARVIN
Windows and Doors
Made for you.
www.marvin.com

Scotland
www.toscotland.com

STATE FARM INSURANCE
www.statefarm.com

about the notorious Alexander Hamilton-Aaron Burr duel in 1804. Based on close examination of the pistols, the author maintains that Hamilton was actually the bad guy, in that he provided guns with trick hair triggers. Burr probably wasn't told how they worked. By secretly setting the hair trigger on his gun, Hamilton gave himself an advantage—he could shoot quickly, and did. But he missed. Burr responded with his fatal shot.

DORLEN L. KOPP
MANDAN, NORTH DAKOTA

PLEASE PASS THE HIDE

THE PICTURE in "Around the Mall" of a hippo specimen and Smithsonian Institution taxidermist William L. Brown caught my eye. Brown was my husband's uncle. He once told us about a Russian tanner he'd hired who made the hides of large animals, like hippos and elephants, supple. His method? He chewed them.

DORIS K. UNDERWOOD
WEST MELBOURNE, FLORIDA

DUBROVNIK MILESTONES

DUBROVNIK ("Magic Kingdom") was the first state in Europe to recognize American independence. Also worth mentioning is that Dubrovnik not only adopted antislavery laws, but it also passed a law in 1492 prohibiting its ships from transporting slaves.

IVANKA KUZMANOVIC
GREENDALE, WISCONSIN

OUR NEW OLD LOOK

I WISH to commend your new art director, Brian Noyes, on the new format ("Back to the Future," Editor's Note). It is clean, clear and easy to read.

MEDORA KALTENBACH
KITTY HAWK, NORTH CAROLINA

Send letters for this column to LettersEd@simag.si.edu or to **Letters Editor, Smithsonian, MRC 951, P.O. Box 37012, Washington, D.C. 20013-7012.** Please include your telephone number and address. Letters may be edited for clarity and length. Send queries and comments about the Smithsonian Institution to info@si.edu or to VIARC, Public Inquiry Mail Service, P.O. Box 37012, Washington, D.C. 20013-7012.

LONGER.

Longer-Lasting Power for High-Tech Devices*

Energizer® e²™ batteries are built with Titanium Technology™ and advanced cell construction so they last longer in your power-hungry, high-tech devices. And the longer they last, the longer you play.

*vs. prior e²™ industry standard high-tech tests average

www.energizer-e2.com

©2003 Energizer.
CANON and Sure Shot are registered trademarks of Canon Inc. All rights reserved. Used by Permission.

"Bourke-White recognized the awesome power of industry and machines," curator Phillips says, "and presented industrial environments as artful compositions."

MARGARET BOURKE-WHITE / TIMEPIX

Machine Dreams

A new exhibition reconsiders the industrial photographs of Margaret Bourke-White's early, "rapturous" period

BY REBECCA MAKSEL

BEFORE MARGARET BOURKE-WHITE became a celebrated photojournalist whose *Life* magazine pictures memorably chronicled the world's flux at mid-century—a breadline after a Kentucky flood, General Patton as he prepared to cross the Rhine, Mahatma Gandhi at his spinning wheel—she specialized in oddly compelling and sometimes ominous photographs of industrial settings, like the one at left.

She took the photograph in 1935 at a vast American Woolen Company mill in Lawrence, Massachusetts, where the machinery, as she depicted it, seemed to march in perfect rows right past the diminutive workers and into the oblivion of the U.S. economy. She was 31, on assignment for *Fortune* magazine, and still in the grip of what she would later call the "rapturous period" when she was "discovering the beauty of industrial shapes" and "people were only incidental to me."

The picture is one of 172 featured in Stephen Bennett Phillips' new book, *Margaret Bourke-White: The Photography of Design 1927-1936* (Rizzoli), which is also the name of an exhibition at the Phillips Collection in Washington, D.C., on view until May 11 before traveling around the country. Phillips, a curator at the gallery (and no relation to its namesake), has assembled for the first time the architectural and corporate works that Bourke-White produced during the initial decade of her career. Her lush photographs of stacked copper pipes, massive piles of braided steel cable and shining plow blades are among those that Phillips

Norway–The Perfect Change of Place.

Whether it's the pristine beauty and tranquility of our fjords, the vivid reminders of our Viking heritage, or the natural warmth of our people, there's not a more enchanting place for a vacation than Norway. For more information, call Discover Norway® at **1-866-6-NORWAY** (866-666-7929), or visit **www.visitnorway.com/us**.

SAS Scandinavian Airlines

Norwegian Coastal Voyage

Norway
A Pure Escape

JOHN ✠ CHRISTIAN
DESIGNERS & CRAFTSMEN

Family Crest Ring
MAN'S 14K GOLD $750

Free Brochure

www.ringbox.com 1-888-646-6466

Bargain Books

America's *biggest* catalog selection

- Choose from thousands of titles, hundreds of new arrivals monthly, countless books you never knew existed!
- Save up to 80% on recent overstocks, imports, reprints. Save 30% on a wide selection of current books.
- Over 60 subjects—books for every reader.

Free Catalog: 800-677-3483

Edward R. Hamilton, Bookseller
0367 Oak, Falls Village CT 06031-5005
www.erhbooks.com/dds

Bourke-White's 1936 photo of Montana's Fort Peck Dam (left), which graced the cover of Luce's first *Life*, portrayed the dam as an ominous sculpture. In 1929, she documented construction of the Chrysler Corporation's skyscraper in Manhattan (right).

says "captured beauty in a world not usually perceived as beautiful."

Since her death at 67 in 1971, Bourke-White has been the subject of biographies, critical studies and even a 1989 movie starring Farrah Fawcett. Despite such fame (or perhaps because of it), Bourke-White has a mixed reputation among photography critics, some of whom complain that her work is too slick. Phillips hopes his new look at Bourke-White's formative years will confirm her place among the century's top photographers. "Some critics feel that Bourke-White wasn't an artist because she never shot anything that wasn't a photo assignment. But these early photographs show her control of design and composition."

Born in the Bronx, New York, to Minnie Bourke and Joseph White, Margaret graduated from Cornell University in 1927 and the next year opened a studio in Cleveland's new Terminal Tower, which she photographed extensively. Among her clients were the Otis Steel Company—she photographed a silhouetted steelworker amid a hail of sparks on the smelter floor—and an electric company. But she decamped in 1930 to Manhattan to document construction of the Chrysler Corporation's landmark building, which would briefly reign as the world's tallest. She even lived there in a penthouse—until evicted in 1934 for not paying the rent.

Her *Life* career began with Henry Luce's first issue, in 1936. Her photograph of the looming Fort Peck Dam in New Deal, Montana, graced the cover, and inside, her word and picture story about the community that had sprung up around it was hailed as the first of a new kind of photo-essay. During World War II, Bourke-White was among the first female war correspondents accredited by the U.S. military, and was sent to England to cover bombing raids over Germany and to Moscow to photograph Stalin as Luftwaffe bombs fell on the city. After the war, she traveled widely, covering disparate subjects such as the Korean War and the poverty and danger endured by gold miners in South Africa. In Korea Bourke-White, then 48, began to experience the first symptoms of Parkinson's disease. She retired from *Life* in 1969.

Bourke-White's magazine photographs, though often snapped on deadline (and disparaged by one critic as "hyperemotional"), are notable for their graphic strength, says Michelle Delaney, a photography specialist at the Smithsonian National Museum of American History: "The work that appears in *Life* would be considered art photography, in my opinion."

One of the 12 photography books authored or coauthored by Bourke-White is 1949's *Halfway to Freedom,* about India at the time it gained independence from Britain. She deplored the caste system, and her pictures captured the plight of so-called untouchables, India's lowest social class. And she said India would benefit from industrialization. "A machine cares nothing about a man's ancestors," she wrote. "It does not feel polluted by his touch, knows no prejudice." ○

SMITHSONIAN copy editor REBECCA MAKSEL last wrote about Dorothea Lange.

MARGARET BOURKE-WHITE / TIMEPIX; ESTATE OF MARGARET BOURKE-WHITE; SYRACUSE UNIVERSITY LIBRARY

Dean Hashimoto, A.B., M.S., M.D., J.D., M.O.H., and now, finally, IRA.

As a man who's devoted his life to the pursuit of knowledge, Dean Hashimoto wasn't going to pick a retirement plan without first doing his homework. That's why he chose an IRA from us, the people with over 80 years' experience managing portfolios for the world's sharpest minds. After discovering that our IRAs offer a variety of investment choices and low expenses, he decided to add one to his resume. A wise choice, by a very wise man.

Log on for ideas, advice, and results. TIAA-CREF.org or call 800.842.1924

TIAA CREF

Managing money for people with other things to think about.℠

RETIREMENT | INSURANCE | MUTUAL FUNDS | COLLEGE SAVINGS | TRUSTS | INVESTMENT MANAGEMENT

Dean Hashimoto became a participant in 1989. TIAA-CREF Individual and Institutional Services, Inc., and Teachers Personal Investors Services, Inc., distribute securities products. For more information, call (800) 842-2733, ext. 5509, for prospectuses. Read them carefully before investing. ©2002 Teachers Insurance and Annuity Association–College Retirement Equities Fund (TIAA-CREF), New York, NY 10017. Dean Hashimoto was compensated.

Washoe leader Brian Wallace (above) claims that climbers (like Dave Schuller, below) desecrate his tribe's ancestral holy place.

Whose Rock Is It Anyway?

An Indian tribe wins the first round in a long fight with rock climbers over access to Lake Tahoe's sacred Cave Rock – BY DAVID ROBERTS

"THERE'S NOWHERE ELSE in the United States with rock climbing like this," says Dave Schuller. "It would be a horrible loss not to be able to climb here anymore." The 30-year-old manager and part-owner of an indoor climbing gym in Reno, Nevada, stands inside a deep, natural alcove near the base of Cave Rock, a 250-foot-tall pillar of volcanic andesite that thrusts skyward on the southeast shore of Lake Tahoe.

The loss Schuller fears is a ban on all climbing at Cave Rock, which could go into effect when the Lake Tahoe Basin unit of the U.S. Forest Service makes a ruling later this spring. The possibility of a ban on climbing grew out of allegations by Washoe Indians, who say the area is their ancestral homeland and that Schuller and others commit sacrilege every time they touch Cave Rock.

The Washoe know the massive rock formation as De'ek wadapush, or Standing Gray Rock. And though white settlers and government agents drove them from the shores of Lake Tahoe more than a century ago and reduced their numbers to 200, the Indians insist De'ek wadapush remains a powerful, sacred site.

"For us, rock climbing trivializes the site for the sake of sport," says Washoe tribal chairman A. Brian Wallace, 45. The Washoe believe that only a few shamans, who have carefully prepared themselves, should ever visit the site.

PETER MCBRIDE (2)

FULL 24-HOUR NONDROWSY ALLERGY RELIEF. MILE AFTER MILE AFTER MILE.

Acres of trees, miles of fields, the Shagster by your side.

CLARINEX® is proven to provide 24 hours of nondrowsy allergy relief.

So whether you're allergic to pets, pollen, mold, mildew, or dust, talk to your doctor and find out if CLARINEX® is right for you.

Then go ahead, open the windows, put the top down, take your best friend for a ride.

Side effects are similar to sugar pill, including sore throat, dry mouth, and fatigue. See adjacent page for additional important information.

CLARINEX®
(desloratadine) 5mg TABLETS

Available by prescription only. Talk to your doctor about CLARINEX®.
For more information, call 1-800-CLARINEX, or visit www.clarinex.com

Schering

Copyright © 2003, Schering Corporation.
Kenilworth, NJ 07033. All rights reserved.
CD1424 1/03 Printed in U.S.A.

CLARINEX®
(desloratadine)
TABLETS

Brief Summary (For full Prescribing Information, see package insert.)

INDICATIONS AND USAGE: Allergic Rhinitis: CLARINEX Tablets 5 mg are indicated for the relief of the nasal and non-nasal symptoms of allergic rhinitis (seasonal and perennial) in patients 12 years of age and older.

Chronic Idiopathic Urticaria: CLARINEX Tablets are indicated for the symptomatic relief of pruritus, reduction in the number of hives, and size of hives, in patients with chronic idiopathic urticaria 12 years of age and older.

CONTRAINDICATIONS: CLARINEX Tablets 5 mg are contraindicated in patients who are hypersensitive to this medication or to any of its ingredients, or to loratadine.

PRECAUTIONS: Carcinogenesis, Mutagenesis, Impairment of Fertility: The carcinogenic potential of desloratadine was assessed using loratadine studies. In an 18-month study in mice and a 2-year study in rats, loratadine was administered in the diet at doses up to 40 mg/kg/day in mice (estimated desloratadine and desloratadine metabolite exposures were approximately 3 times the AUC in humans at the recommended daily oral dose) and 25 mg/kg/day in rats (estimated desloratadine and desloratadine metabolite exposures were approximately 30 times the AUC in humans at the recommended daily oral dose). Male mice given 40 mg/kg/day loratadine had a significantly higher incidence of hepatocellular tumors (combined adenomas and carcinomas) than concurrent controls. In rats, a significantly higher incidence of hepatocellular tumors (combined adenomas and carcinomas) was observed in males given 10 mg/kg/day and in males and females given 25 mg/kg/day. The estimated desloratadine and desloratadine metabolite exposures of rats given 10 mg/kg of loratadine were approximately 7 times the AUC in humans at the recommended daily oral dose. The clinical significance of these findings during long-term use of desloratadine is not known.

In genotoxicity studies with desloratadine, there was no evidence of genotoxic potential in a reverse mutation assay (*Salmonella/E. coli* mammalian microsome bacterial mutagenicity assay) or in two assays for chromosomal aberrations (human peripheral blood lymphocyte clastogenicity assay and mouse bone marrow micronucleus assay).

There was no effect on female fertility in rats at desloratadine doses up to 24 mg/kg/day (estimated desloratadine and desloratadine metabolite exposures were approximately 130 times the AUC in humans at the recommended daily oral dose). A male specific decrease in fertility, demonstrated by reduced female conception rates, decreased sperm numbers and motility, and histopathologic testicular changes, occurred at an oral desloratadine dose of 12 mg/kg in rats (estimated desloratadine exposures were approximately 45 times the AUC in humans at the recommended daily oral dose). Desloratadine had no effect on fertility in rats at an oral dose of 3 mg/kg/day (estimated desloratadine and desloratadine metabolite exposures were approximately 8 times the AUC in humans at the recommended daily oral dose).

Pregnancy Category C: Desloratadine was not teratogenic in rats at doses up to 48 mg/kg/day (estimated desloratadine and desloratadine metabolite exposures were approximately 210 times the AUC in humans at the recommended daily oral dose) or in rabbits at doses up to 60 mg/kg/day (estimated desloratadine exposures were approximately 230 times the AUC in humans at the recommended daily oral dose). In a separate study, an increase in preimplantation loss and a decreased number of implantations and fetuses were noted in female rats at 24 mg/kg (estimated desloratadine and desloratadine metabolite exposures were approximately 120 times the AUC in humans at the recommended daily oral dose). Reduced body weight and slow righting reflex were reported in pups at doses of 9 mg/kg/day or greater (estimated desloratadine and desloratadine metabolite exposures were approximately 50 times or greater than the AUC in humans at the recommended daily oral dose). Desloratadine had no effect on pup development at an oral dose of 3 mg/kg/day (estimated desloratadine and desloratadine metabolite exposures were approximately 7 times the AUC in humans at the recommended daily oral dose). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, desloratadine should be used during pregnancy only if clearly needed.

Nursing Mothers: Desloratadine passes into breast milk, therefore a decision should be made whether to discontinue nursing or to discontinue desloratadine, taking into account the importance of the drug to the mother.

Pediatric Use: The safety and effectiveness of CLARINEX Tablets in pediatric patients under 12 years of age have not been established.

Geriatric Use: Clinical studies of desloratadine did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently from younger subjects. Other reported clinical experience has not identified differences between the elderly and younger patients. In general, dose selection for an elderly patient should be cautious, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy. (see **CLINICAL PHARMACOLOGY – Special Populations**).

Information for Patients: Patients should be instructed to use CLARINEX Tablets as directed. As there are no food effects on bioavailability, patients can be instructed that CLARINEX Tablets may be taken without regard to meals. Patients should be advised not to increase the dose or dosing frequency as studies have not demonstrated increased effectiveness at higher doses and somnolence may occur.

ADVERSE REACTIONS: Allergic Rhinitis: In multiple-dose placebo-controlled trials, 2,834 patients received CLARINEX Tablets at doses of 2.5 mg to 20 mg daily, of whom 1,655 patients received the recommended daily dose of 5 mg. In patients receiving 5 mg daily, the rate of adverse events was similar between CLARINEX and placebo-treated patients. The percent of patients who withdrew prematurely due to adverse events was 2.4% in the CLARINEX group and 2.6% in the placebo group. There were no serious adverse events in these trials in patients receiving desloratadine. All adverse events that were reported by greater than or equal to 2% of patients who received the recommended daily dose of CLARINEX Tablets (5.0 mg once-daily), and that were more common with CLARINEX Tablet than placebo, are listed in Table 5.

Table 5

Incidence of Adverse Events Reported by ≥ 2% of Allergic Rhinitis Patients in Placebo-Controlled, Multiple-Dose Clinical Trials

Adverse Experience	CLARINEX Tablets 5 mg (n=1,655)	Placebo (n=1,652)
Pharyngitis	4.1%	2.0%
Dry Mouth	3.0%	1.9%
Myalgia	2.1%	1.8%
Fatigue	2.1%	1.2%
Somnolence	2.1%	1.8%
Dysmenorrhea	2.1%	1.6%

The frequency and magnitude of laboratory and electrocardiographic abnormalities were similar in CLARINEX and placebo-treated patients.

There were no differences in adverse events for subgroups of patients as defined by gender, age, or race.

Chronic Idiopathic Urticaria: In multiple-dose, placebo-controlled trials of chronic idiopathic urticaria, 211 patients received CLARINEX Tablets and 205 received placebo. Adverse events that were reported by greater than or equal to 2% of patients who received CLARINEX Tablets and that were more common with CLARINEX than placebo were (rates for CLARINEX and placebo, respectively): headache (14%, 13%), nausea (5%, 2%), fatigue (5%, 1%), dizziness (4%, 3%), pharyngitis (3%, 2%), dyspepsia (3%, 1%), and myalgia (3%, 1%).

The following spontaneous adverse events have been reported during the marketing of desloratadine: tachycardia, and rarely hypersensitivity reactions (such as rash, pruritus, urticaria, edema, dyspnea, and anaphylaxis), and elevated liver enzymes including bilirubin.

DRUG ABUSE AND DEPENDENCE: There is no information to indicate that abuse or dependency occurs with CLARINEX Tablets.

OVERDOSAGE: Information regarding acute overdosage is limited to experience from clinical trials conducted during the development of the CLARINEX product. In a dose ranging trial, at doses of 10 mg and 20 mg/day somnolence was reported.

Single daily doses of 45 mg were given to normal male and female volunteers for 10 days. All ECGs obtained in this study were manually read in a blinded fashion by a cardiologist. In CLARINEX-treated subjects, there was an increase in mean heart rate of 9.2 bpm relative to placebo. The QT interval was corrected for heart rate (QT_c) by both the Bazett and Fridericia methods. Using the QT_c (Bazett) there was a mean increase of 8.1 msec in CLARINEX-treated subjects relative to placebo. Using QT_c (Fridericia) there was a mean increase of 0.4 msec in CLARINEX-treated subjects relative to placebo. No clinically relevant adverse events were reported.

In the event of overdose, consider standard measures to remove any unabsorbed drug. Symptomatic and supportive treatment is recommended. Desloratadine and 3-hydroxydesloratadine are not eliminated by hemodialysis.

Lethality occurred in rats at oral doses of 250 mg/kg or greater (estimated desloratadine and desloratadine metabolite exposures were approximately 120 times the AUC in humans at the recommended daily oral dose). The oral median lethal dose in mice was 353 mg/kg (estimated desloratadine exposures were approximately 290 times the human daily oral dose on a mg/m^2 basis). No deaths occurred at oral doses up to 250 mg/kg in monkeys (estimated desloratadine exposures were approximately 810 times the human daily oral dose on a mg/m^2 basis).

Schering®

Schering Corporation
Kenilworth, NJ 07033 USA

2/02 **23882116T-JBS**

U.S. Patent Nos. 4,659,716; 4,863,931; 4,804,666; 5,595,997; and 6,100,274.

Copyright © 2002, Schering Corporation. All rights reserved.

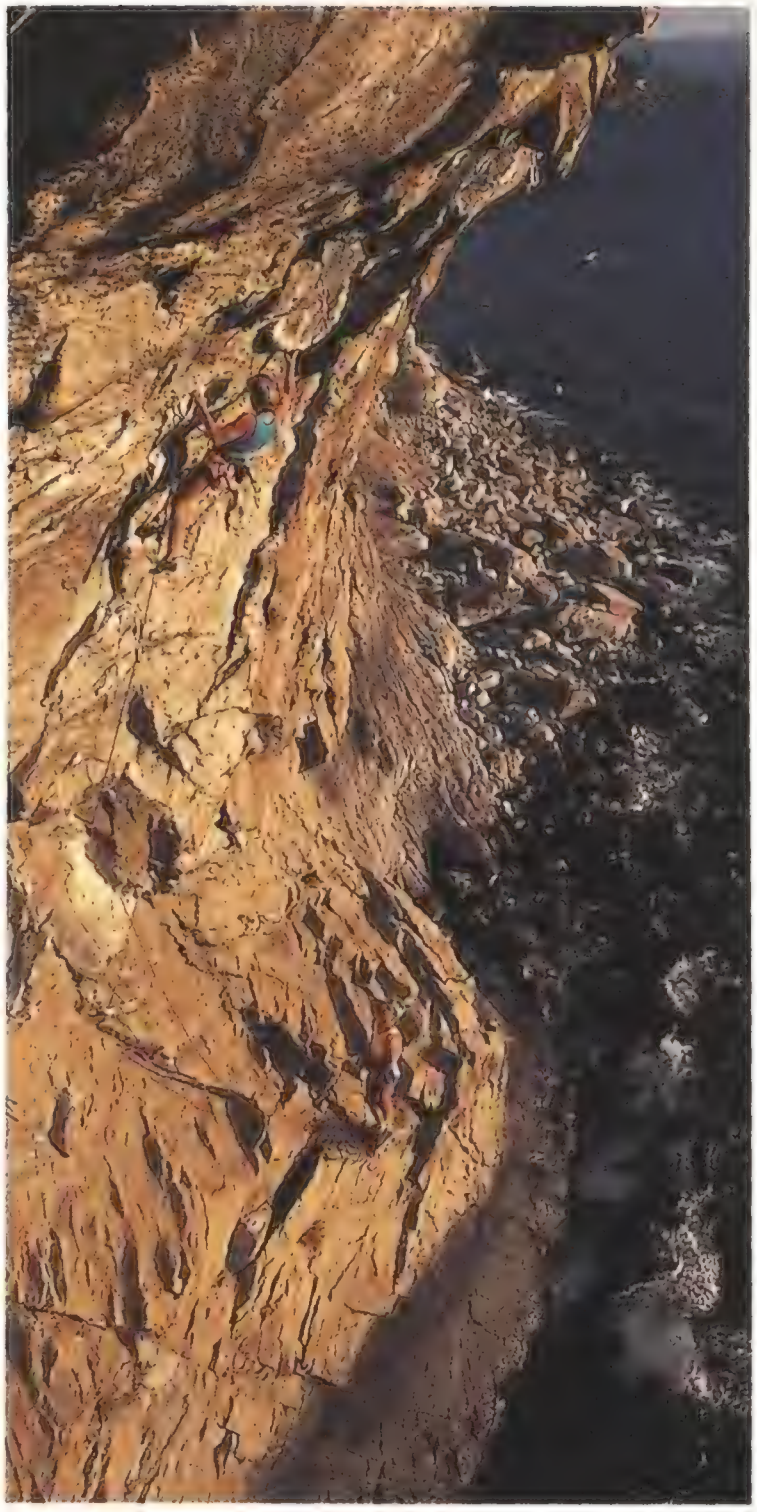
Cave Rock is not exactly unspoiled, however. As Schuller starts to pull himself up the vertical rock face, the roar of car traffic muffles the sound of his exertions. Twin tunnels blasted through the heart of Cave Rock in 1931 and 1957 carry tourists to and from the casinos and hotels of South Lake Tahoe on four lanes of U.S. Highway 50.

The Washoe say that vehicles pass through Cave Rock so quickly that they have little effect on the inherent power of the site. "Climbing, on the other hand, provides an extended interface between individuals and the rock in which the power of the rock can be changed or altered," reads an October 2002 Forest Service environmental impact statement summation of the Washoe point of view. "Many Washoe view the placement of even a single climbing bolt as defacement."

Above Schuller's head, like so many Christmas tree ornaments, dangle scores of "perma-draws," two-foot-long cables hung from bolts to assist climbers and provide safety. More than 300 bolts sprout from the overhanging walls, and the gray andesite is smeared with the white gymnast's chalk climbers use on their hands.

Over the past 15 years, Cave Rock developed into one of the hottest sport-climbing locations in the country. Groups of climbers can be found here every summer weekend, virtually all of whom oppose the ban. "I would ask what [the Washoe] have done this century to demonstrate their respect for the site besides maintain a superstitious avoidance," the impact statement quoted one climber.

For the Washoe, who traditionally were warned to avoid the place, the rock's dark power is potentially catastrophic. "We're required to say a prayer before we even mention it," says Wallace. No women are allowed to visit Cave Rock; in days gone by, they were forbidden even to look upon it.



GREG EPPERSON

World-class climber Lynn Hill (above) tackles a route called Overboard.

The Washoe believe that shamans who have undergone elaborate preparations lasting up to a month can absorb power from the rock. With this power they can deal with *me'tsunge*, frightening, troll-like creatures bent on wreaking evil. At the very sight of a me'tsunge, a Washoe might fall sick or become temporarily paralyzed. Only a shaman can turn the malevolent power into a protective force.

Today Washoe shamans still make the long pilgrimage to De'ek wadapush, although some have turned back at the sight of the rock face swarming with climbers. In 1999, the supervisor of the Forest Service's Lake Tahoe Basin unit responded to the Washoe's concern by outlining five alternatives, from prohibiting all non-Washoe from visiting Cave Rock to leaving it open to all. The Forest Service then held public meetings and invited written comments.

Climbers pointed out that they had cleaned up the site, which, by 1987, had become a hangout for teenagers. "It smelled like an outhouse," says Schuller, "full of beer cans, broken glass and campfire scars."

Following the hearings, the Forest Service recommended a compromise: climbers could continue to climb the rock but could not put in new bolts or establish new routes. The Forest Service would remove nonhistoric graffiti and ban all-terrain vehicles but permit hiking and picnicking. The Washoe refused to accept these terms. "In the long view, only the repatriation of Washoe homelands is acceptable," says Wallace.

In 2000, the appointment of a new Forest Service supervisor, Maribeth Gustafson, tipped the scales toward the Washoe. In the 2002 impact statement, she decreed a ban on climbing on grounds that it lessens the site's historical value. Climbers responded predictably.

"We view a ban on climbing at Cave Rock as arbitrary, capricious and unconstitutional," says Jason Keith, policy director of the Access Fund, a Boulder, Colorado-based organization dedicated to keeping crags open to climbers. If the Forest Service finalizes the ban, as it's expected to do, the fund plans to appeal the decision.

In the meantime, Brian Wallace and other Washoe cling to the belief they will someday repossess not only Cave Rock but all of Lake Tahoe. "Why not?" he says. "We've stared down extinction.

"We believe that eventually we'll find our way home." ○

DAVID ROBERTS, a climber, has written books both on mountaineering and Indians.

Wanted to be an astronaut.

Afraid of heights.

Wouldn't settle for a window that blocked a single star.

At Marvin, what you want is always within reach. Each of our wood and clad wood windows and doors are made to order. You choose the style and design options that make it your own. Visit **www.marvin.com** or call us at **1-800-268-7644** (in Canada, 1-800-263-6161).

©2003 Marvin Windows and Doors. All rights reserved. ®Registered trademark of Marvin Windows and Doors.

MARVIN
Windows and Doors

Made for you.®

Caution, Planets Ahead

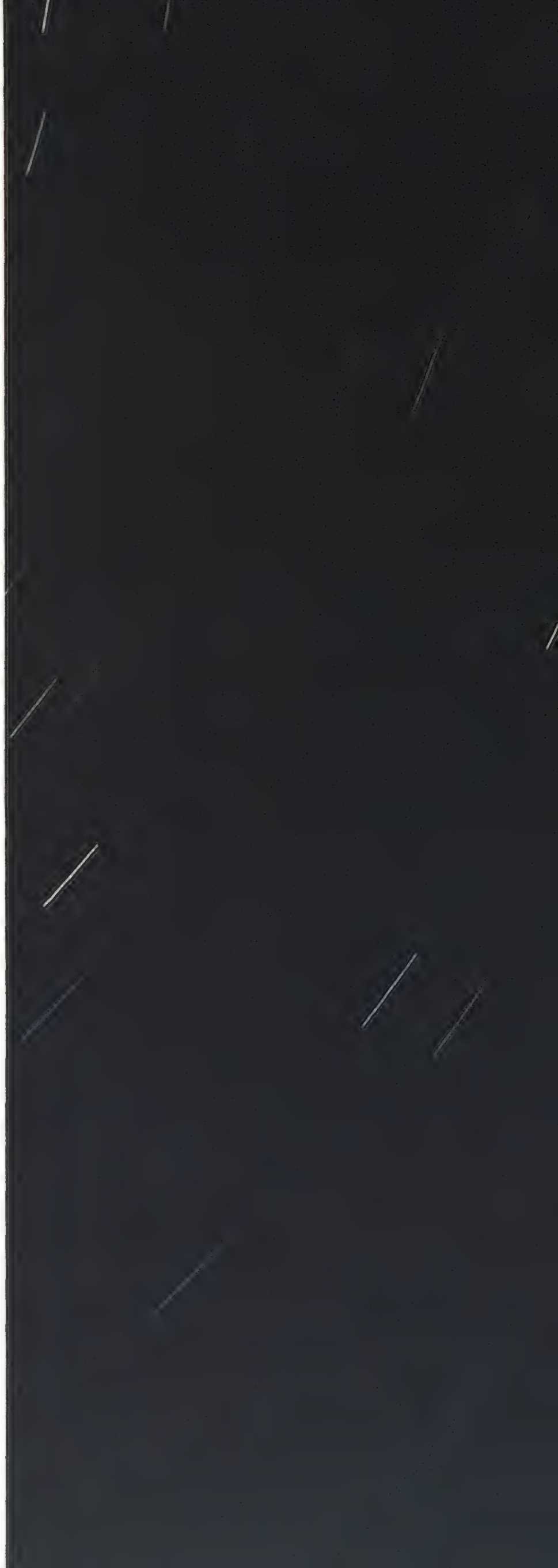
The world's largest (maybe) 9-planet solar system model goes up along Route 1 in northern Maine

BY SAM HOOPER SAMUELS

BEGINNING ABOUT 4.5 BILLION years ago, the theory goes, a galactic cloud of interstellar gas and dust collapsed and ignited in a blaze of thermonuclear fusion to create our Sun. Swirling around that fireball were particles that gathered into spherical clumps, whose gravitational fields attracted smaller clumps, and so on, eventually creating the four terrestrial planets (Mercury, Venus, Earth and Mars) and the four gas giants (Jupiter, Saturn, Uranus and Neptune), with Pluto, that icy enigma, playing at the outskirts. All told, cosmologists say, it took 100 million years for the solar system to take shape.

Of course, you can do the job much faster if you use fiberglass—provided, as Kevin McCartney is discovering, you have lots of help. McCartney, 48, a professor of geology at the University of Maine at Presque Isle and director of the Northern Maine Museum of Science, is the man behind one of the world's largest scale models of the solar system. When completed this spring, it will stretch along the northernmost reaches of U.S. Route 1, from the 50-foot Sun inside Presque Isle's museum to the one-inch Pluto and its half-inch moon, Charon, mounted on the wall of the tourist information center 40 miles away in Houlton. In between, at precisely calibrated intervals, the other eight planets will rest atop ten-foot steel posts—heavenly roadside attractions in parking lots and farm plots in northern Maine's remote Aroostook County, which juts so deeply into Canada that many residents grow up speaking French as a second language.

Maybe four years is a long time to set up nine painted spheres, but McCartney has used only volunteer labor and donated materials. Total funding for his project: zero. He planned it that way, he says: "We've had a dozen phone calls in the last year, saying, 'This is great. We were going to do



In the world according to Maine scientist McCartney, Saturn (right, amid stars seeming to streak because of a 15-minute time exposure) is in Westfield, 9.7 miles from the Sun.

the same thing. Where did you get the money?' The answer is, we never had any thought of money. We knew we couldn't get it."

I FIRST SPOT the Maine Solar System Model through the car windshield. I'm on the road to catch the raising of Saturn. It's late October, and McCartney is racing the calendar to install the planet before the snow flies. In this awkward, in-between time of year in the Pine Tree State's northernmost county (which is larger than Connecticut and Rhode Island combined), the hills appear rather bleak; the potato harvest has been in for a few weeks, leaving brown, barren fields. Forget any picturesque notions of rocky coasts, quaint cottages and $10 lobster rolls. This is hard country, where folks endure cruel winters with a can-do attitude. I drive past poor but tidy homes; past potato barns built into the earth like dugouts; past Littleton, Monticello, Bridgewater and Mars Hill (pure coincidence—the celestial Mars rests about eight miles north of Mars Hill); past farm fields and over a long hill. And suddenly Saturn hovers there.

"My neck is stuck way out on this," says model maestro McCartney (above, pointing, at the hoisting of the 1,200-pound Saturn replica). "People have worked very, very hard." A five-and-a-half inch Spaceship Earth (left) is parked at a car dealership.

Suspended from a crane and being lowered gingerly onto its post, the planet is a four and a half foot orange orb, painted with curling stripes, tilted on an axis 26 degrees from the vertical and sporting a set of steel mesh rings. It weighs 1,200 pounds.

Several dozen people are on hand to see the ringed giant rise. Men in suits and ties mingle with laborers in baseball caps and students from Caribou Tech Center, who built the planet's frame. Distinctive in a long mustache-less beard, white trousers, white work shirt and white Greek fisherman's cap, McCartney buzzes through the crowd, issuing commands. "Early on I used to say this project's going to have a thousand and one problems. But I think it's going to have a thousand and one solutions," McCartney says. "Well, we've had a thousand and one problems. We really have." Saturn, for instance. Only after the school group that painted the planet put down their brushes did the students learn that the image provided them by NASA was a bit too purple. So they repainted it in proper saturnine oranges.

McCartney, whose academic career brought him to Maine 15 years ago from Florida, is a master of the unlikely project. He assembled the Northern Maine Museum of Science from scratch, with volunteer help and, as usual, no funding. A few of the display cases are fashioned from wood fished out of a trash bin. A diorama depicting sea life more than 400 million years ago is on loan from the American Museum of Natural History in New York City. Trained as a paleontologist, McCartney collects model airplanes and images of Abraham Lincoln. At their 1913 Arts and Crafts house in Caribou, he and his wife, Kate, have more than 250 antique laundry irons.

But the solar system possesses him now. "My neck is stuck way out on this project," McCartney says of his model. "I'm sort of the instigator. People have worked very, very hard."

JUST NOW, newspaper ad sales manager Jim Berry is drilling a hole in Saturn's post and remembering his first encounter with McCartney at a Kiwanis Club meeting. "I went home that night and said to my wife, 'I met this guy today. He's a wacko. You can't believe what he's going to try to do.' " When he got up the next morning he said, "Wait a minute. This is a great idea. I've got to get involved in this. This is just too good to pass up."

McCartney has that effect on people; one day they think he's crazy, the next day they're painting Jupiter's spot. His list of prominent "squirrels," as he inexplicably calls his volunteers, runs eight pages long. Add the anonymous students who worked on a planet here or a stanchion there, and McCartney estimates that more than 500 squirrels

CARL D. WALSH / AURORA; RICHARD RAND; P. 32, 33 CARL D. WALSH / AURORA

Fighting Back with Aricept®

Mom's forgetfulness turned out to be Alzheimer's. But we didn't just sit here and do nothing.

*I got her to a doctor right away and he put her on ARICEPT.® Now she's doing better.**

If a person forgets names, places or facts – and has trouble with everyday things like reading or shopping – it may not be normal aging. It could be Alzheimer's disease. So it's important to see a doctor as soon as you can.

There is no cure for Alzheimer's. But a prescription drug called ARICEPT® has been used by millions of people to help their symptoms.

In studies, ARICEPT® has been proven to work for mild to moderate Alzheimer's. It has helped people improve their memory over time. It has also helped them to keep doing everyday things on their own, longer.

Ask your doctor if ARICEPT® is right for you or your loved one. It is the #1 prescribed drug for Alzheimer's in the world. The sooner you know it's Alzheimer's, the sooner ARICEPT® can help.

ONCE-A-DAY

ARICEPT®

(donepezil HCl)

5-MG AND 10-MG TABLETS

Strength in the face of Alzheimer's

ARICEPT® is well tolerated but may not be for everyone. Some people may experience nausea, diarrhea, not sleeping well, vomiting, muscle cramps, feeling very tired, or not wanting to eat. In studies, these side effects were usually mild and went away over time. Some people taking ARICEPT® may experience fainting. People at risk for ulcers should tell their doctors because their condition may get worse.

Please see additional important product information on accompanying page.

To learn more and to receive a memory checklist,
call 800-760-6029 ext.94
or visit www.aricept.com

*Individual responses to ARICEPT® can be different – people may get better, stay the same or not get better.

ONCE-A-DAY
ARICEPT® (donepezil HCl) 5-MG AND 10-MG TABLETS
STRENGTH IN THE FACE OF ALZHEIMER'S™

ARICEPT® (Donepezil Hydrochloride Tablets)

Brief Summary—see package insert for full prescribing information. **INDICATIONS AND USAGE** ARICEPT® is indicated for the treatment of mild to moderate dementia of the Alzheimer's type. **CONTRAINDICATIONS** ARICEPT® is contraindicated in patients with known hypersensitivity to donepezil hydrochloride or to piperidine derivatives. **WARNINGS** ***Anesthesia:*** ARICEPT®, as a cholinesterase inhibitor, is likely to exaggerate succinylcholine-type muscle relaxation during anesthesia. ***Cardiovascular Conditions:*** Because of their pharmacological action, cholinesterase inhibitors may have vagotonic effects on the sinoatrial and atrioventricular nodes. This effect may manifest as bradycardia or heart block in patients both with and without known underlying cardiac conduction abnormalities. Syncopal episodes have been reported in association with the use of ARICEPT®. ***Gastrointestinal Conditions:*** Through their primary action, cholinesterase inhibitors may be expected to increase gastric acid secretion due to increased cholinergic activity. Therefore, patients should be monitored closely for symptoms of active or occult gastrointestinal bleeding, especially those at increased risk for developing ulcers, e.g., those with a history of ulcer disease or those receiving concurrent nonsteroidal anti-inflammatory drugs (NSAIDS). Clinical studies of ARICEPT® have shown no increase, relative to placebo, in the incidence of either peptic ulcer disease or gastrointestinal bleeding. ARICEPT®, as a predictable consequence of its pharmacological properties, has been shown to produce diarrhea, nausea and vomiting. These effects, when they occur, appear more frequently with the 10 mg/day dose than with the 5 mg/day dose. In most cases, these effects have been mild and transient, sometimes lasting one to three weeks, and have resolved during continued use of ARICEPT®. ***Genitourinary:*** Although not observed in clinical trials of ARICEPT®, cholinomimetics may cause bladder outflow obstruction. ***Neurological Conditions:*** Seizures: Cholinomimetics are believed to have some potential to cause generalized convulsions. However, seizure activity also may be a manifestation of Alzheimer's Disease. ***Pulmonary Conditions:*** Because of their cholinomimetic actions, cholinesterase inhibitors should be prescribed with care to patients with a history of asthma or obstructive pulmonary disease. **PRECAUTIONS Drug-Drug Interactions** ***Drugs Highly Bound to Plasma Proteins:*** Drug displacement studies have been performed *in vitro* between this highly bound drug (96%) and other drugs such as furosemide, digoxin, and warfarin. ARICEPT® at concentrations of 0.3-10 µg/mL did not affect the binding of furosemide (5 µg/mL), digoxin (2 ng/mL), and warfarin (3 µg/mL) to human albumin. Similarly, the binding of ARICEPT® to human albumin was not affected by furosemide, digoxin, and warfarin. ***Effect of ARICEPT® on the Metabolism of Other Drugs:*** No *in vivo* clinical trials have investigated the effect of ARICEPT® on the clearance of drugs metabolized by CYP 3A4 (e.g. cisapride, terfenadine) or by CYP 2D6 (e.g. imipramine). However, *in vitro* studies show a low rate of binding to these enzymes (mean K_i about 50-130 µM), that, given the therapeutic plasma concentrations of donepezil (164 nM), indicates little likelihood of interference. Whether ARICEPT® has any potential for enzyme induction is not known. ***Effect of Other Drugs on the Metabolism of ARICEPT®:*** Ketoconazole and quinidine, inhibitors of CYP450, 3A4 and 2D6, respectively, inhibit donepezil metabolism *in vitro*. Whether there is a clinical effect of these inhibitors is not known. Inducers of CYP 2D6 and CYP 3A4 (e.g., phenytoin, carbamazepine, dexamethasone, rifampin, and phenobarbital) could increase the rate of elimination of ARICEPT®. ***Use with Anticholinergics:*** Because of their mechanism of action, cholinesterase inhibitors have the potential to interfere with the activity of anticholinergic medications. ***Use with Cholinomimetics and Other Cholinesterase Inhibitors:*** A synergistic effect may be expected when cholinesterase inhibitors are given concurrently with succinylcholine, similar neuromuscular blocking agents or cholinergic agonists such as bethanechol. **Carcinogenesis, Mutagenesis, Impairment of Fertility** Carcinogenicity studies of donepezil have not been completed. Donepezil was not mutagenic in the Ames reverse mutation assay in bacteria. In the chromosome aberration test in cultures of Chinese hamster lung (CHL) cells, some clastogenic effects were observed. Donepezil was not clastogenic in the *in vivo* mouse micronucleus test. Donepezil had no effect on fertility in rats at doses up to 10 mg/kg/day (approximately 8 times the maximum recommended human dose on a mg/m² basis). **Pregnancy** ***Pregnancy Category C:*** Teratology studies conducted in pregnant rats at doses up to 16 mg/kg/day (approximately 13 times the maximum recommended human dose on a mg/m² basis) and in pregnant rabbits at doses up to 10 mg/kg/day (approximately 16 times the maximum recommended human dose on a mg/m² basis) did not disclose any evidence for a teratogenic potential of donepezil. However, in a study in which pregnant rats were given up to 10 mg/kg/day (approximately 8 times the maximum recommended human dose on a mg/m² basis) from day 17 of gestation through day 20 postpartum, there was a slight increase in still births and a slight decrease in pup survival through day 4 postpartum at this dose; the next lower dose tested was 3 mg/kg/day. There are no adequate or well-controlled studies in pregnant women. ARICEPT® should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. **Nursing Mothers** It is not known whether donepezil is excreted in human breast milk. ARICEPT® has no indication for use in nursing mothers. **Pediatric Use** There are no adequate and well-controlled trials to document the safety and efficacy of ARICEPT® in any illness occurring in children. **ADVERSE REACTIONS Adverse Events Leading to Discontinuation** The rates of discontinuation from controlled clinical trials of ARICEPT® due to adverse events for the ARICEPT® 5 mg/day treatment groups were comparable to those of placebo-treatment groups at approximately 5%. The rate of discontinuation of patients who received 7-day escalations from 5 mg/day to 10 mg/day, was higher at 13%. The most common adverse events leading to discontinuation, defined as those occurring in at least 2% of patients and at twice the incidence seen in placebo patients, are shown in Table 1.

Table 1. Most Frequent Adverse Events Leading to Withdrawal from Controlled Clinical Trials by Dose Group

Dose Group	Placebo	5 mg/day ARICEPT®	10 mg/day ARICEPT®
Patients Randomized	355	350	315
Event/%Discontinuing			
Nausea	1%	1%	3%
Diarrhea	0%	<1%	3%
Vomiting	<1%	<1%	2%

Most Frequent Adverse Clinical Events Seen in Association with the Use of ARICEPT® The most common adverse events, defined as those occurring at a frequency of at least 5% in patients receiving 10 mg/day and twice the placebo rate, are largely predicted by ARICEPT®'s cholinomimetic effects. These include nausea, diarrhea, insomnia, vomiting, muscle cramp, fatigue and anorexia. These adverse events were often of mild intensity and transient, resolving during continued ARICEPT® treatment without the need for dose modification. There is evidence to suggest that the frequency of these common adverse events may be affected by the rate of titration. An open-label study was conducted with 269 patients who received placebo in the 15- and 30-week studies. These patients were titrated to a dose of 10 mg/day over a 6-week period. The rates of common adverse events were lower than those seen in patients titrated to 10 mg/day over one week in the controlled clinical trials and were comparable to those seen in patients on 5 mg/day. See Table 2 for a comparison of the most common adverse events following one and six week titration regimens.

Table 2. Comparison of Rates of Adverse Events in Patients Titrated to 10 mg/day Over 1 and 6 Weeks

	No titration		One-week titration	Six-week titration
Adverse Event	**Placebo (n=315)**	**5 mg/day (n=311)**	**10 mg/day (n=315)**	**10 mg/day (n=269)**
Nausea	6%	5%	19%	6%
Diarrhea	5%	8%	15%	9%
Insomnia	6%	6%	14%	6%
Fatigue	3%	4%	8%	3%
Vomiting	3%	3%	8%	5%
Muscle cramps	2%	6%	8%	3%
Anorexia	2%	3%	7%	3%

Adverse Events Reported in Controlled Trials The events cited reflect experience gained under closely monitored conditions of clinical trials in a highly selected patient population. In actual clinical practice or in other clinical trials, these frequency estimates may not apply, as the conditions of use, reporting behavior, and the kinds of patients treated may differ. Table 3 lists treatment emergent signs and symptoms that were reported in at least 2% of patients in placebo-controlled trials who received ARICEPT® and for which the rate of occurrence was greater for ARICEPT® assigned than placebo assigned patients. In general, adverse events occurred more frequently in female patients and with advancing age.

Table 3. Adverse Events Reported in Controlled Clinical Trials in at Least 2% of Patients Receiving ARICEPT® (donepezil HCl) and at a Higher Frequency than Placebo-treated Patients

Body System/Adverse Event	Placebo (n=355)	ARICEPT® (n=747)
Percent of Patients with any Adverse Event	**72**	**74**
Body as a Whole		
Headache	9	10
Pain, various locations	8	9
Accident	6	7
Fatigue	3	5
Cardiovascular System		
Syncope	1	2
Digestive System		
Nausea	6	11
Diarrhea	5	10
Vomiting	3	5
Anorexia	2	4
Hemic and Lymphatic System		
Ecchymosis	3	4
Metabolic and Nutritional Systems		
Weight Decrease	1	3
Musculoskeletal System		
Muscle Cramps	2	6
Arthritis	1	2
Nervous System		
Insomnia	6	9
Dizziness	6	8
Depression	<1	3
Abnormal Dreams	0	3
Somnolence	<1	2
Urogenital System		
Frequent Urination	1	2

Other Adverse Events Observed During Clinical Trials ARICEPT® has been administered to over 1700 individuals during clinical trials worldwide. Approximately 1200 of these patients have been treated for at least 3 months and more than 1000 patients have been treated for at least 6 months. Controlled and uncontrolled trials in the United States included approximately 900 patients. In regards to the highest dose of 10 mg/day, this population includes 650 patients treated for 3 months, 475 patients treated for 6 months and 116 patients treated for over 1 year. The range of patient exposure is from 1 to 1214 days. Treatment emergent signs and symptoms that occurred during 3 controlled clinical trials and two open-label trials in the United States were recorded as adverse events by the clinical investigators using terminology of their own choosing. To provide an overall estimate of the proportion of individuals having similar types of events, the events were grouped into a smaller number of standardized categories using a modified COSTART dictionary and event frequencies were calculated across all studies. These categories are used in the listing below. The frequencies represent the proportion of 900 patients from these trials who experienced that event while receiving ARICEPT®. All adverse events occurring at least twice are included, except for those already listed in Tables 2 or 3, COSTART terms too general to be informative, or events less likely to be drug caused. Events are classified by body system and listed using the following definitions: *frequent adverse events*—those occurring in at least 1/100 patients; *infrequent adverse events*—those occurring in 1/100 to 1/1000 patients. These adverse events are not necessarily related to ARICEPT® treatment and in most cases were observed at a similar frequency in placebo-treated patients in the controlled studies. No important additional adverse events were seen in studies conducted outside the United States. **Body as a Whole:** *Frequent:* influenza, chest pain, toothache; *Infrequent:* fever, edema face, periorbital edema, hernia hiatal, abscess, cellulitis, chills, generalized coldness, head fullness, listlessness. **Cardiovascular System:** *Frequent:* hypertension, vasodilation, atrial fibrillation, hot flashes, hypotension; *Infrequent:* angina pectoris, postural hypotension, myocardial infarction, AV block (first degree), congestive heart failure, arteritis, bradycardia, peripheral vascular disease, supraventricular tachycardia, deep vein thrombosis. **Digestive System:** *Frequent:* fecal incontinence, gastrointestinal bleeding, bloating, epigastric pain; *Infrequent:* eructation, gingivitis, increased appetite, flatulence, periodontal abscess, cholelithiasis, diverticulitis, drooling, dry mouth, fever sore, gastritis, irritable colon, tongue edema, epigastric distress, gastroenteritis, increased transaminases, hemorrhoids, ileus, increased thirst, jaundice, melena, polydipsia, duodenal ulcer, stomach ulcer. **Endocrine System:** *Infrequent:* diabetes mellitus, goiter. **Hemic and Lymphatic System:** *Infrequent:* anemia, thrombocythemia, thrombocytopenia, eosinophilia, erythrocytopenia. **Metabolic and Nutritional Disorders:** *Frequent:* dehydration; *Infrequent:* gout, hypokalemia, increased creatine kinase, hyperglycemia, weight increase, increased lactate dehydrogenase. **Musculoskeletal System:** *Frequent:* bone fracture; *Infrequent:* muscle weakness, muscle fasciculation. **Nervous System:** *Frequent:* delusions, tremor, irritability, paresthesia, aggression, vertigo, ataxia, increased libido, restlessness, abnormal crying, nervousness, aphasia; *Infrequent:* cerebrovascular accident, intracranial hemorrhage, transient ischemic attack, emotional lability, neuralgia, coldness (localized), muscle spasm, dysphoria, gait abnormality, hypertonia, hypokinesia, neurodermatitis, numbness (localized), paranoia, dysarthria, dysphasia, hostility, decreased libido, melancholia, emotional withdrawal, nystagmus, pacing. **Respiratory System:** *Frequent:* dyspnea, sore throat, bronchitis; *Infrequent:* epistaxis, post nasal drip, pneumonia, hyperventilation, pulmonary congestion, wheezing, hypoxia, pharyngitis, pleurisy, pulmonary collapse, sleep apnea, snoring. **Skin and Appendages:** *Frequent:* pruritus, diaphoresis, urticaria; *Infrequent:* dermatitis, erythema, skin discoloration, hyperkeratosis, alopecia, fungal dermatitis, herpes zoster, hirsutism, skin striae, night sweats, skin ulcer. **Special Senses:** *Frequent:* cataract, eye irritation, vision blurred; *Infrequent:* dry eyes, glaucoma, earache, tinnitus, blepharitis, decreased hearing, retinal hemorrhage, otitis externa, otitis media, bad taste, conjunctival hemorrhage, ear buzzing, motion sickness, spots before eyes. **Urogenital System:** *Frequent:* urinary incontinence, nocturia; *Infrequent:* dysuria, hematuria, urinary urgency, metrorrhagia, cystitis, enuresis, prostate hypertrophy, pyelonephritis, inability to empty bladder, breast fibroadenosis, fibrocystic breast, mastitis, pyuria, renal failure, vaginitis. **Postintroduction Reports** Voluntary reports of adverse events temporally associated with ARICEPT® that have been received since market introduction that are not listed above, and that there is inadequate data to determine the causal relationship with the drug include the following: abdominal pain, agitation, cholecystitis, confusion, convulsions, hallucinations, heart block (all types), hemolytic anemia, hepatitis, hyponatremia, neuroleptic malignant syndrome, pancreatitis, and rash. **OVERDOSAGE Because strategies for the management of overdose are continually evolving, it is advisable to contact a Poison Control Center to determine the latest recommendations for the management of an overdose of any drug.** As in any case of overdose, general supportive measures should be utilized. Overdosage with cholinesterase inhibitors can result in cholinergic crisis characterized by severe nausea, vomiting, salivation, sweating, bradycardia, hypotension, respiratory depression, collapse and convulsions. Increasing muscle weakness is a possibility and may result in death if respiratory muscles are involved. Tertiary anticholinergics such as atropine may be used as an antidote for ARICEPT® overdosage. Intravenous atropine sulfate titrated to effect is recommended: an initial dose of 1.0 to 2.0 mg IV with subsequent doses based upon clinical response. Atypical responses in blood pressure and heart rate have been reported with other cholinomimetics when co-administered with quaternary anticholinergics such as glycopyrrolate. It is not known whether ARICEPT® and/or its metabolites can be removed by dialysis (hemodialysis, peritoneal dialysis, or hemofiltration). Dose-related signs of toxicity in animals included reduced spontaneous movement, prone position, staggering gait, lacrimation, clonic convulsions, depressed respiration, salivation, miosis, tremors, fasciculation and lower body surface temperature. **DOSAGE AND ADMINISTRATION** The dosages of ARICEPT® shown to be effective in controlled clinical trials are 5 mg and 10 mg administered once per day. The higher dose of 10 mg did not provide a statistically significantly greater clinical benefit than 5 mg. There is a suggestion, however, based upon order of group mean scores and dose trend analyses of data from these clinical trials, that a daily dose of 10 mg of ARICEPT® might provide additional benefit for some patients. Accordingly, whether or not to employ a dose of 10 mg is a matter of prescriber and patient preference. Evidence from the controlled trials indicates that the 10 mg dose, with a one week titration, is likely to be associated with a higher incidence of cholinergic adverse events than the 5 mg dose. In open label trials using a 6 week titration, the frequency of these same adverse events was similar between the 5 mg and 10 mg dose groups. Therefore, because steady state is not achieved for 15 days and because the incidence of untoward effects may be influenced by the rate of dose escalation, treatment with a dose of 10 mg should not be contemplated until patients have been on a daily dose of 5 mg for 4 to 6 weeks. ARICEPT® should be taken in the evening, just prior to retiring, and may be taken with or without food.

Eisai Inc. Teaneck, NJ 07666 · Pfizer U.S. Pharmaceuticals New York, NY 10017

200177 Revised December 2000

ARICEPT® is a registered trademark of Eisai Co., Ltd.

© 2002 Eisai Inc. and Pfizer Inc. All rights reserved.

have pitched in so far. Perley Dean, a retired Presque Isle High School guidance counselor who wears a "Maine Potato Board" baseball cap, got the job of persuading several landowners that what was missing on their property was a planet. "Many of them don't stay up late at night reading about the galaxy," Dean deadpans.

Constructing planets built to last 20 years without maintenance and 50 years overall is no mean feat. Giants Jupiter and Saturn in particular needed surveyors, heavy equipment, gravel and steel-reinforced concrete pads.

But the greater challenge is scale. If you want to be able to see tiny Charon, then the Sun has to be the size of a building and has to be many miles away. Most astronomy books and most museums fudge the problem with two separate representations: one comparing the objects' relative sizes, the other the distances between them. That wouldn't do for McCartney. To be sure, there are precedents. The Lakeview Museum Community Solar System in Peoria, Illinois—the largest, according to *Guinness World Records*—spans 40 miles, as the Maine model does, but boasts somewhat smaller astronomical objects, like a 36-foot Sun. Then there's the Sweden Solar System, which has a Sun in Stockholm and covers four times more ground than McCartney's. But it lacks a Saturn. "If you don't have ten objects," he says, "you don't have a model."

Given that the Earth is 93 million miles from the Sun, the Maine model's scale is 93 million to 1. That puts the grapefruit-size Earth (built around a Styrofoam core) a mile from the Sun, or squarely on the lawn of Percy's Auto Sales in Presque Isle.

Percy's salesman Phil Mills says customers don't seem to notice the Earth and Moon hovering at the car lot's edge. The heavenly bodies, he hypothesizes, are just too small. Alas, a suitably conspicuous, beach-ball-size Earth would call for a 300-foot-diameter Sun, not to mention a Pluto about 240 miles away.

Travelers wishing to explore the solar system start at the Northern Maine Museum of Science in Folsom Hall on the university campus. Putting a 50-foot-diameter Sun inside a three-story building wasn't feasible, so the Sun, the model's only non-spherical item, consists of a wooden yellow arch curving through stairwells and hallways on all three floors.

From the three-story Sun's beam to the walnut-size Pluto and its pea-size moon, the Maine Solar System Model stretches 40 miles, at an astronomical scale of 93 million miles to one.

Heading south by car, drivers may miss the smaller planets. As the odometer hits 0.4, a two-inch Mercury appears in the garden of Burrelle's Information Services. At 0.7 miles, you can find five-inch Venus in the parking lot of, aptly, the Budget Traveler Motor Inn. At one mile comes Earth, tilted at its 23-degree angle, and, 16 feet away from it, the Moon. Mars is at 1.5 miles, near the "Welcome to Presque Isle" sign.

The outer planets are worth the voyage. At 5.3 miles giant Jupiter hovers, more than five feet in diameter and spectacularly painted with multicolored stripes and its Great Red Spot, the vast hurricane-like storm raging in the planet's southern hemisphere. Jupiter's four largest moons—Io, Europa, Ganymede and Callisto, which were discovered by Galileo and are made out of two golf balls coated with fiberglass and two billiard balls, respectively—sit atop separate posts nearby. (In the interest of expediency, McCartney and crew have chosen to ignore the 36 small moons discovered since Galileo.)

After passing Saturn, it's almost a billion "miles" farther to the future site of Uranus, at 19.5 miles on the odometer, in Bridgewater, and another billion to Littleton, where rests 21-inch Neptune, which McCartney and coworkers managed to hoist in mid-November just before the snow came. Odometer reading: 30.6.

As for the debate among astronomers about whether Pluto is a planet or an asteroid, McCartney is of the old school. "Pluto was certainly part of the solar system for all my life up to the present," he says. "We'll keep it here," at the 40-mile mark, on the wall in the Houlton information center. The real Pluto is so far away and so small—with a diameter of some 1,400 miles— that astronomers didn't observe it until 1930. I couldn't find it either until an attendant showed me where it was hanging between the center's rest rooms and the pamphlets for other local attractions.

Soon there will be another brochure on the rack—a much-needed guide to the hard-to-spot roadside planets. McCartney says he didn't want to clutter the highways with signs pointing out the celestial objects. Then, too, there's something fitting that those model celestial objects await discovery, betraying no obvious evidence of the quirky force of nature that made them. ○

SAM HOOPER SAMUELS wrote about Trappist caskets in our October 2002 issue.

BRIAN NOYES

©2002 Archer Daniels Midland Company

What if we looked at the world as one giant farm field?

In tomorrow's global food economy,

every crop will grow where it grows best.

And ADM can link farmers to almost

any market in the world. It's a natural way to improve

agricultural efficiency, make food more

affordable, and feed a hungry world.

Nature has answers.

Is anyone listening?

Yes.

ADM

THE NATURE OF WHAT'S TO COME™

admworld.com

"How-*deeeee!*"

Homely country togs defined a beloved
Grand Ole Opry *stalwart* – BY VICTORIA DAWSON

[*Minnie Pearl's hat*
NATIONAL MUSEUM OF AMERICAN HISTORY]

SARAH OPHELIA COLLEY, who portrayed the character Minnie Pearl on country music's *Grand Ole Opry* for half a century, never intended to make a career of playing the endearing bumpkin she created.

Colley, the youngest of five daughters born to a prominent family in Centerville, Tennessee, and a graduate of the fashionable Ward-Belmont finishing school in Nashville, was an aspiring actress whose plans for a serious career in theater had stalled. When she introduced Minnie Pearl to the *Opry* audience in 1940, Colley believed the character represented a temporary gig. "She was just a stopgap until I could get what I wanted, something I would settle for until my real destiny came to pass," Colley wrote in her 1980 autobiography.

Before long, however, Minnie assumed a life of her own, and Colley, however inadvertently, was on her way to superstardom as a comedian. The homely elements of Minnie's costume—checked gingham dress with puffed sleeves and tight bodice, white cotton stockings, secondhand Mary Janes and,

MURRAY RISS

THE NEW ROLLOVER ADVANTAGE℠

Would you like that rolled over easy?

You've worked hard to build your nest egg. Are you sure you want to leave it behind in your former employer's retirement plan? With the T. Rowe Price Rollover Advantage service, it's easy to take more control of your retirement savings.

Call one of our Rollover Specialists to open your account right over the phone. They can help you choose a T. Rowe Price fund, or you can pick from over 1,000 other funds*—all with no loads, no sales charges, and no commissions. They can even work with your former employer to help coordinate the rollover process. In fact, our Rollover Specialists handle just about all the IRA paperwork and will mail you the completed forms to sign.

It's never been easier to roll over your nest egg. To open your account, call us or visit our Web site and have your old 401(k) statement in hand.

TROWEPRICE.COM/ROLLOVERADVANTAGE

1-800-276-9236

T. Rowe Price®

INVEST WITH CONFIDENCE

*This service is offered by T. Rowe Price Investment Services, Inc., member NASD/SIPC. Please call to request a prospectus with more complete information, including fees, risks, and expenses; please read it carefully before investing.

ROA066339

most notably, a dime store straw hat bedecked with silk flowers, a $1.98 price tag dangling from the brim—would become instantly recognizable to millions of country-music fans.

Several years before Colley's death at the age of 83 in 1996, she donated Minnie's getup to the Smithsonian's Museum of American History. "Minnie Pearl represented a wonderful intersection of rural comedy and modern media," says curator Charlie McGovern. "And all of that character's identity, the desire for respectability, the hope, the naivete, were symbolized in her hat. It became a trademark from the get-go."

Minnie Pearl debuted on the *Grand Ole Opry* on November 30, 1940, in a three-minute audition buried in the final hour of the *Opry*'s four-hour program. Colley did not appear in costume for this tryout; instead she wore street clothes. "I still wanted to be Ophelia Colley, future dramatic actress, doing a comedy character part. I wasn't ready to be Minnie Pearl," she would recall.

Even the folks at Nashville's WSM radio, which broadcast the *Grand Ole Opry*, had their doubts: Would *Opry* audiences feel the character was phony, given Colley's pedigree? Would they take offense, perceiving in Minnie Pearl a put-down of country people? Not, it turned out, in the least. That late-night broadcast audition generated some 300 pieces of fan mail and led to Colley's regular *Opry* appearances.

"How-*deeeee*! I'm just so proud to be here!" Minnie declared each Saturday night from the Opry stage to a studio audience, relaying the latest happenings from back home in Grinder's Switch, an imaginary hamlet not far from Nashville, its name appropriated from an actual country railroad junction. She bore gossipy tidbits about relatives and friends—Brother, Uncle Nabob, Aunt Ambrosia, Doc Payne, Lizzie Tinkum and Hezzie, Minnie's ever-elusive and painfully dense "feller." When, for example, Minnie suggested to Hezzie that it was time they married, he answered, "Why, who would have us?"

Almost immediately, Colley recognized the homespun charm of Minnie's

Sarah Colley (as Minnie Pearl, on the Opry stage with singer Hank Snow in 1974) said she named her character after "two mountain names I loved."

country togs. The costume had been cobbled together in a single afternoon in Aiken, South Carolina, when Colley, trying out Minnie's character in a series of performances on the road, spent less than $10 to assemble the look that would, with minor adjustments, define her character. "I dressed 'Minnie' the way I thought a girl would look who came to town from the country on a Saturday to do a little tradin' and a little flirtin'," Colley said. The signature price tag came a couple of years later, the result of a fortuitous oversight. After purchasing dime-store flowers for her hat, Colley forgot to remove the tag. During a performance, she turned her head; the tag spilled over the brim. A perfect gag: the audience loved it.

By 1942, Minnie had graduated to the *Prince Albert Show*, the half-hour, NBC network portion of the *Opry*, where the simple, good-hearted country girl with a flair for gossip, "kissin' games" and church socials became a fixture and developed a national following. From 1969 to 1991, the character was also a staple of the television series *Hee Haw*. In 1975, Colley became the first comedian to be inducted into the Country Music Hall of Fame.

If the humor was predictable, it was also sustaining. "For the rural working class, in a society that was changing radically, going into a second world war, moving into town, moving north, the country comic was a reminder of who they were, where they had come from," says Bill C. Malone, professor emeritus of Tulane University and one of country music's ranking authorities. "In a world that was becoming unfamiliar, Minnie gave them reassurance."

"In those days, radio performers were never really allowed to say anything to their audience; they were introduced and delivered their performance," says Charles K. Wolfe, author of numerous books on folk, country and popular music. "Minnie addressed the audience, getting them to see her as an individual."

Colley, say those who knew her, had little in common with Minnie. "She was the epitome of the old gentrified Nashville," says Wolfe. "Gracious, soft-spoken, always well dressed, nowhere near the simplistic, brash man chaser she portrayed." Colley and her husband, Henry Cannon, a pilot and businessman, lived next door to the Tennessee Governor's Mansion. (They had no children.)

Minnie Pearl retired in 1991 after Colley, at the age of 78, suffered a severe stroke. She died five years later of another stroke. The woman who had viewed Minnie as a stepping-stone toward a career in theater had grown to admire, love and even envy the bumptious, carefree girl who never aged. In the late 1980s, looking back on her career in a column she wrote for the *Nashville Banner*, Colley recalled: "I had no idea I would become hooked on laughter and become so fond of the fans and so fond of the character Minnie." Colley's father's advice, given to her as she first began working up Minnie's persona, had proved remarkably prescient: "You'll make a fortune off that someday, Phel, if you keep it kind." ○

VICTORIA DAWSON is a freelance writer based in Washington, D.C.

MICHAEL MAUNEY / TIMEPIX

Choice is the ultimate luxury.
Fancy Feast®, in more than forty varieties, is the ultimate choice.

Delight the palate and arouse the senses of the true connoisseur with the gourmet selections of Fancy Feast. An unparalleled collection of culinary delights for those who demand the very best.

Good taste is easy to recognize.™

www.FancyFeast.com

PRAVACHOL IS THE ONLY CHOLESTEROL LOWERING DRUG PROVEN TO HELP PROTECT AGAINST 1st AND 2nd HEART ATTACK AND STROKE.

IMPORTANT CONSIDERATIONS:

Pravachol® (pravastatin sodium), a prescription drug, is not for everyone, including women who are pregnant or nursing or may become pregnant, or people with liver problems. And because serious side effects can result, tell your doctor about any unexplained muscle pain or weakness you experience while on Pravachol, and about any other medications you are taking. Your doctor may do blood tests to check for liver problems. Some mild side effects, such as slight rash or stomach upset, occur in 2-4% of patients.

Ask your doctor if Pravachol is right for you.

Please see product information following this advertisement.

1-877-PRAVA-CALL

Bristol-Myers Squibb Company
Princeton, NJ 08543 U.S.A.

www.pravachol.com

WORRIED ABOUT LOWERING YOUR CHOLESTEROL NUMBERS?

CHECK THE FACTS.

If you've tried diet and exercise for 3 months or more, and your cholesterol numbers haven't come down enough, you're not alone.

In a study of patients with high cholesterol, fewer than 35% of those treated with diet and exercise were able to meet their cholesterol goals.*

1 How do I know when I should ask my doctor about a cholesterol lowering drug?

The National Cholesterol Education Program states your doctor should consider adding a cholesterol lowering drug if your total cholesterol is still over 200 mg/dL and any of the following apply to you:

- you smoke
- are overweight
- have heart disease
- have diabetes
- are a man over 45 or a woman over 55
- have a family history of early heart disease

Pravachol® (pravastatin sodium) doesn't just lower your cholesterol numbers, it lowers your risk of having a heart attack or stroke to help you live a longer, healthier life.

2 If I need a cholesterol lowering drug, why Pravachol?

High cholesterol puts you at risk for heart disease. Landmark clinical studies, involving 19,592 people, show that Pravachol (pravastatin sodium) along with a healthy diet is the only cholesterol lowering drug proven to help prevent both 1st and 2nd heart attack and stroke in people with high cholesterol or heart disease. And you should know, doctors have prescribed Pravachol more than 72 million times in the past 11 years.

3 Don't all cholesterol lowering drugs claim they have proof?

Not all cholesterol lowering drugs are proven to help prevent heart attacks and strokes. In fact, while the leading brand† effectively lowers cholesterol, its ads admit that it has not been proven to help prevent heart disease or heart attacks.

4 Now I've got the facts. What's my next step?

If you've tried diet and exercise and your cholesterol is still too high, call your doctor today and ask if Pravachol is right for you. For more information about Pravachol, log onto www.pravachol.com.

PRAVACHOL®
pravastatin sodium 40 mg tablets

*Pearson, *Arch Intern Med.* 2000; 160:459-467.

†Leading brand is the number one prescribed brand of cholesterol lowering medication in the U.S., according to IMS National Prescription Audit, week of 8/19/02.

D3-K0118

PRAVACHOL®

Rx only

(pravastatin sodium) Tablets

Brief Summary of Prescribing Information. For complete prescribing information, please consult official package circular.

CONTRAINDICATIONS: Hypersensitivity to any component of this medication. Active liver disease or unexplained, persistent elevations in liver function tests (see **WARNINGS**). *Pregnancy and lactation.* Atherosclerosis is a chronic process and discontinuation of lipid-lowering drugs during pregnancy should have little impact on the outcome of long-term therapy of primary hypercholesterolemia. Cholesterol and other products of cholesterol biosynthesis are essential components for fetal development (including synthesis of steroids and cell membranes). Since HMG-CoA reductase inhibitors decrease cholesterol synthesis and possibly the synthesis of other biologically active substances derived from cholesterol, they are contraindicated during pregnancy and in nursing mothers. **Pravastatin should be administered to women of childbearing age only when such patients are highly unlikely to conceive and have been informed of the potential hazards.** If the patient becomes pregnant while taking this class of drug, therapy should be discontinued immediately and the patient apprised of the potential hazard to the fetus (see **PRECAUTIONS: Pregnancy**).

WARNINGS: Liver Enzymes: HMG-CoA reductase inhibitors, like some other lipid-lowering therapies, have been associated with biochemical abnormalities of liver function. In three long-term (4.8-5.9 years), placebo-controlled clinical trials (WOS, LIPID, CARE; see **CLINICAL PHARMACOLOGY: Clinical Studies**), 19,592 subjects (19,768 randomized), were exposed to pravastatin or placebo. In an analysis of serum transaminase values (ALT, AST), incidences of marked abnormalities were compared between the pravastatin and placebo treatment groups; a marked abnormality was defined as a post-treatment test value greater than three times the upper limit of normal for subjects with pretreatment values less than or equal to the upper limit of normal, or four times the pretreatment value for subjects with pretreatment values greater than the upper limit of normal but less than 1.5 times the upper limit of normal. Marked abnormalities of ALT or AST occurred with similar low frequency (≤1.2%) in both treatment groups. Overall, clinical trial experience showed that liver function test abnormalities observed during pravastatin therapy were usually asymptomatic, not associated with cholestasis, and did not appear to be related to treatment duration. **It is recommended that liver function tests be performed prior to the initiation of therapy, prior to the elevation of the dose, and when otherwise clinically indicated.** Active liver disease or unexplained persistent transaminase elevations are contraindications to the use of pravastatin (see **CONTRAINDICATIONS**). Caution should be exercised when pravastatin is administered to patients who have a recent history of liver disease, have signs that may suggest liver disease (e.g., unexplained aminotransferase elevations, jaundice), or are heavy users of alcohol (see **CLINICAL PHARMACOLOGY: Pharmacokinetics/Metabolism**). Such patients should be closely monitored, started at the lower end of the recommended dosing range, and titrated to the desired therapeutic effect. Patients who develop increased transaminase levels or signs and symptoms of liver disease should be monitored with a second liver function evaluation to confirm the finding and be followed thereafter with frequent liver function tests until the abnormality(ies) return to normal. Should an increase in AST or ALT of three times the upper limit of normal or greater persist, withdrawal of pravastatin therapy is recommended. **Skeletal Muscle: Rare cases of rhabdomyolysis with acute renal failure secondary to myoglobinuria have been reported with pravastatin and other drugs in this class.** Uncomplicated myalgia has also been reported in pravastatin-treated patients (see **ADVERSE REACTIONS**). Myopathy, defined as muscle aching or muscle weakness in conjunction with increases in creatine phosphokinase (CPK) values to greater than 10 times the upper normal limit, was rare (<0.1%) in pravastatin clinical trials. Myopathy should be considered in any patient with diffuse myalgias, muscle tenderness or weakness, and/or marked elevation of CPK. Patients should be advised to report promptly unexplained muscle pain, tenderness or weakness, particularly if accompanied by malaise or fever. **Pravastatin therapy should be discontinued if markedly elevated CPK levels occur or myopathy is diagnosed or suspected. Pravastatin therapy should also be temporarily withheld in any patient experiencing an acute or serious condition predisposing to the development of renal failure secondary to rhabdomyolysis, e.g., sepsis; hypotension; major surgery; trauma; severe metabolic, endocrine, or electrolyte disorders; or uncontrolled epilepsy.** The risk of myopathy during treatment with another HMG-CoA reductase inhibitor is increased with concurrent therapy with either erythromycin, cyclosporine, niacin, or fibrates. However, neither myopathy nor significant increases in CPK levels have been observed in three reports involving a total of 100 post-transplant patients (24 renal and 76 cardiac) treated for up to two years concurrently with pravastatin 10-40 mg and cyclosporine. Some of these patients also received other concomitant immunosuppressive therapies. Further, in clinical trials involving small numbers of patients who were treated concurrently with pravastatin and niacin, there were no reports of myopathy. Also, myopathy was not reported in a trial of combination pravastatin (40 mg/day) and gemfibrozil (1200 mg/day), although 4 of 75 patients on the combination showed marked CPK elevations versus one of 73 patients receiving placebo. There was a trend toward more frequent CPK elevations and patient withdrawals due to musculoskeletal symptoms in the group receiving combined treatment as compared with the groups receiving placebo, gemfibrozil, or pravastatin monotherapy (see **PRECAUTIONS: Drug Interactions**). **The use of fibrates alone may occasionally be associated with myopathy. The combined use of pravastatin and fibrates should be avoided unless the benefit of further alterations in lipid levels is likely to outweigh the increased risk of this drug combination.**

PRECAUTIONS: General: PRAVACHOL may elevate creatine phosphokinase and transaminase levels (see **ADVERSE REACTIONS**). *This should be considered in the differential diagnosis of chest pain in a patient on therapy with pravastatin. Homozygous Familial Hypercholesterolemia.* Pravastatin has not been evaluated in patients with rare homozygous familial hypercholesterolemia. In this group of patients, it has been reported that HMG-CoA reductase inhibitors are less effective because the patients lack functional LDL receptors. *Renal Insufficiency.* A single 20 mg oral dose of pravastatin was administered to 24 patients with varying degrees of renal impairment (as determined by creatinine clearance). No effect was observed on the pharmacokinetics of pravastatin or its 3α-hydroxy isomeric metabolite (SQ 31,906). A small increase was seen in mean AUC values and half-life (t½) for the inactive enzymatic ring hydroxylation metabolite (SQ 31,945). Given this small sample size, the dosage administered, and the degree of individual variability, *patients with renal impairment who are receiving pravastatin should be closely monitored.* **Information for Patients:** Patients should be advised to report promptly unexplained muscle pain, tenderness or weakness, particularly if accompanied by malaise or fever (see **WARNINGS: Skeletal Muscle**). **Drug Interactions:** ***Immunosuppressive Drugs, Gemfibrozil, Niacin (Nicotinic Acid), Erythromycin:*** See **WARNINGS: Skeletal Muscle**. *Cytochrome P450 3A4 Inhibitors: In vitro* and *in vivo* data indicate that pravastatin is not metabolized by cytochrome P450 3A4 to a clinically significant extent. This has been shown in studies with known cytochrome P450 3A4 inhibitors (see diltiazem and itraconazole below). Other examples of cytochrome P450 3A4 inhibitors include ketoconazole, mibefradil, and erythromycin. *Diltiazem* – Steady-state levels of diltiazem (a known, weak inhibitor of P450 3A4) had no effect on the pharmacokinetics of pravastatin. In this study, the AUC and C_{max} of another HMG-CoA reductase inhibitor which is known to be metabolized by cytochrome P450 3A4 increased by factors of 3.6 and 4.3, respectively. *Itraconazole* – The mean AUC and C_{max} for pravastatin were increased by factors of 1.7 and 2.5, respectively, when given with itraconazole (a potent P450 3A4 inhibitor which also inhibits p-glycoprotein transport) as compared to placebo. The mean t½ was not affected by itraconazole, suggesting that the relatively small increases in C_{max} and AUC were due solely to increased bioavailability rather than a decrease in clearance, consistent with inhibition of p-glycoprotein transport by itraconazole. This drug transport system is thought to affect bioavailability and excretion of HMG-CoA reductase inhibitors, including pravastatin. The AUC and C_{max} of another HMG-CoA reductase inhibitor which is known to be metabolized by cytochrome P450 3A4 increased by factors of 19 and 17, respectively, when given with itraconazole. *Antipyrine:* Since concomitant administration of pravastatin had no effect on the clearance of antipyrine, interactions with other drugs metabolized via the same hepatic cytochrome isozymes are not expected. *Cholestyramine/Colestipol:* Concomitant administration resulted in an approximately 40 to 50% decrease in the mean AUC of pravastatin. However, when pravastatin was administered 1 hour before or 4 hours after cholestyramine or 1 hour before colestipol and a standard meal, there was no clinically significant decrease in bioavailability or therapeutic effect. (See **DOSAGE AND ADMINISTRATION: Concomitant Therapy**.) *Warfarin:* Concomitant administration of 40 mg pravastatin had no clinically significant effect on prothrombin time when administered in a study to normal elderly subjects who were stabilized on warfarin. *Cimetidine:* The $AUC_{0\text{-}12\ hr}$ for pravastatin when given with cimetidine was not significantly different from the AUC for pravastatin when given alone. A significant difference was observed between the AUC's for pravastatin when given with cimetidine compared to when administered with antacid. *Digoxin:* In a crossover trial involving 18 healthy male subjects given 20 mg pravastatin and 0.2 mg digoxin concurrently for 9 days, the bioavailability parameters of digoxin were not affected. The AUC of pravastatin tended to increase, but the overall bioavailability of pravastatin plus its metabolites SQ 31,906 and SQ 31,945 was not altered. *Cyclosporine:* Some investigators have measured cyclosporine levels in patients on pravastatin (up to 20 mg), and to date, these results indicate no clinically meaningful elevations in cyclosporine levels. In one single-dose study, pravastatin levels were found to be increased in cardiac transplant patients receiving cyclosporine. *Gemfibrozil:* In a crossover study in 20 healthy male volunteers given concomitant single doses of pravastatin and gemfibrozil, there was a significant decrease in urinary excretion and protein binding of pravastatin. In addition, there was a significant increase in AUC, C_{max}, and T_{max} for the pravastatin metabolite SQ 31,906. Combination therapy with pravastatin and gemfibrozil is generally not recommended. (See **WARNINGS: Skeletal Muscle**.) In interaction studies with *aspirin, antacids* (1 hour prior to PRAVACHOL), *cimetidine, nicotinic acid,* or *probucol,* no statistically significant differences in bioavailability were seen when PRAVACHOL was administered. **Endocrine Function:** HMG-CoA reductase inhibitors interfere with cholesterol synthesis and lower circulating cholesterol levels and, as such, might theoretically blunt adrenal or gonadal steroid hormone production. Results of clinical trials with pravastatin in males and post-menopausal females were inconsistent with regard to possible effects of the drug on basal steroid hormone levels. In a study of 21 males, the mean testosterone response to human chorionic gonadotropin was significantly reduced ($p<0.004$) after 16 weeks of treatment with 40 mg of pravastatin. However, the percentage of patients showing a ≥50% rise in plasma testosterone after human chorionic gonadotropin stimulation did not change significantly after therapy in these patients. The effects of HMG-CoA reductase inhibitors on spermatogenesis and fertility have not been studied in adequate numbers of patients. The effects, if any, of pravastatin on the pituitary-gonadal axis in pre-menopausal females are unknown. Patients treated with pravastatin who display clinical evidence of endocrine dysfunction should be evaluated appropriately. Caution should also be exercised if an HMG-CoA reductase inhibitor or other agent used to lower cholesterol levels is administered to patients also receiving other drugs (e.g., ketoconazole, spironolactone, cimetidine) that may diminish the levels or activity of steroid hormones. **CNS Toxicity:** CNS vascular lesions, characterized by perivascular hemorrhage and edema and mononuclear cell infiltration of perivascular spaces, were seen in dogs treated with pravastatin at a dose of 25 mg/kg/day. These effects in dogs were observed at approximately 59 times the human dose of 80 mg/day, based on AUC. Similar CNS vascular lesions have been observed with several other drugs in this class. A chemically similar drug in this class produced optic nerve degeneration (Wallerian degeneration of retinogeniculate fibers) in clinically normal dogs in a dose-dependent fashion starting at 60 mg/kg/day, a dose that produced mean plasma drug levels about 30 times higher than the mean drug level in humans taking the highest recommended dose (as measured by total enzyme inhibitory activity). This same drug also produced vestibulocochlear Wallerian-like degeneration and retinal ganglion cell chromatolysis in dogs treated for 14 weeks at 180 mg/kg/day, a dose which resulted in a mean plasma drug level similar to that seen with the 60 mg/kg/day dose. **Carcinogenesis, Mutagenesis, Impairment of Fertility:** Please see Full Prescribing Information. **Pregnancy: Pregnancy Category X.** See **CONTRAINDICATIONS**. Safety in pregnant women has not been established. Pravastatin was not teratogenic in rats at doses up to 1000 mg/kg daily or in rabbits at doses of up to 50 mg/kg daily. These doses resulted in 10x (rabbit) or 120x (rat) the human exposure based on surface area ($mg/meter^2$). Rare reports of congenital anomalies have been received following intrauterine exposure to other HMG-CoA reductase inhibitors. In a review[1] of approximately 100 prospectively followed pregnancies in women exposed to simvastatin or lovastatin, the incidences of congenital anomalies, spontaneous abortions and fetal deaths/stillbirths did not exceed what would be expected in the general population. The number of cases is adequate only to exclude a three-to-four-fold increase in congenital anomalies over the background incidence. In 89% of the prospectively followed pregnancies, drug treatment was initiated prior to pregnancy and was discontinued at some point in the first trimester when pregnancy was identified. As safety in pregnant women has not been established and there is no apparent benefit to therapy with PRAVACHOL (pravastatin sodium) during pregnancy (see **CONTRAINDICATIONS**), treatment should be immediately discontinued as soon as pregnancy is recognized. PRAVACHOL should be administered to women of child-bearing potential only when such patients are highly unlikely to conceive and have been informed of the potential hazards. **Nursing Mothers:** A small amount of pravastatin is excreted in human breast milk. Because of the potential for serious adverse reactions in nursing infants, women taking PRAVACHOL should not nurse (see **CONTRAINDICATIONS**). **Pediatric Use:** Safety and effectiveness in individuals less than 18 years old have not been established. Hence, treatment in patients less than 18 years old is not recommended at this time. **Geriatric Use:** Two secondary prevention trials with pravastatin (CARE and LIPID) included a total of 6,593 subjects treated with pravastatin 40 mg for periods ranging up to 6 years. Across these two studies, 36.1% of pravastatin subjects were aged 65 and older and 0.8% were aged 75 and older. The beneficial effect of pravastatin in elderly subjects in reducing cardiovascular events and in modifying lipid profiles was similar to that seen in younger subjects. The adverse event profile in the elderly was similar to that in the overall population. Other reported clinical experience has not identified differences in responses to pravastatin between elderly and younger patients. Mean pravastatin AUCs are slightly (25-50%) higher in elderly subjects than in healthy young subjects, but mean C_{max}, T_{max} and t½ values are similar in both age groups and substantial accumulation of pravastatin would not be expected in the elderly (see **CLINICAL PHARMACOLOGY: Pharmacokinetics/Metabolism**).

ADVERSE REACTIONS: Pravastatin is generally well tolerated; adverse reactions have usually been mild and transient. In 4-month long placebo-controlled trials, 1.7% of pravastatin-treated patients and 1.2% of placebo-treated patients were discontinued from treatment because of adverse experiences attributed to study drug therapy; this difference was not statistically significant. (See also **PRECAUTIONS: Geriatric Use** section.)

Adverse Clinical Events: Short-Term Controlled Trials: *All adverse clinical events (regardless of attribution) reported in more* than 2% of pravastatin-treated patients in placebo-controlled trials of up to four months duration are identified in the table below; also shown are the percentages of patients in whom these medical events were believed to be related or possibly related to the drug:

Adverse Events in >2 Percent of Patients Treated with Pravastatin 10-40 mg in Short-Term Placebo-Controlled Trials

	All Events		Events Attributed to Study Drug	
Body System/Event	**Pravastatin (N = 900) % of patients**	**Placebo (N = 411) % of patients**	**Pravastatin (N = 900) % of patients**	**Placebo (N = 411) % of patients**
Cardiovascular				
Cardiac Chest Pain	4.0	3.4	0.1	0.0
Dermatologic				
Rash	4.0*	1.1	1.3	0.9
Gastrointestinal				
Nausea/Vomiting	7.3	7.1	2.9	3.4
Diarrhea	6.2	5.6	2.0	1.9
Abdominal Pain	5.4	6.9	2.0	3.9
Constipation	4.0	7.1	2.4	5.1
Flatulence	3.3	3.6	2.7	3.4
Heartburn	2.9	1.9	2.0	0.7
General				
Fatigue	3.8	3.4	1.9	1.0
Chest Pain	3.7	1.9	0.3	0.2
Influenza	2.4*	0.7	0.0	0.0
Musculoskeletal				
Localized Pain	10.0	9.0	1.4	1.5
Myalgia	2.7	1.0	0.6	0.0
Nervous System				
Headache	6.2	3.9	1.7*	0.2
Dizziness	3.3	3.2	1.0	0.5
Renal/Genitourinary				
Urinary Abnormality	2.4	2.9	0.7	1.2
Respiratory				
Common Cold	7.0	6.3	0.0	0.0
Rhinitis	4.0	4.1	0.1	0.0
Cough	2.6	1.7	0.1	0.0

*Statistically significantly different from placebo.

The safety and tolerability of PRAVACHOL at a dose of 80 mg in two controlled trials with a mean exposure of 8.6 months was similar to that of PRAVACHOL at lower doses except that 4 out of 464 patients taking 80 mg of pravastatin had a single elevation of CK >10x ULN compared to 0 out of 115 patients taking 40 mg of pravastatin.

Long-Term Controlled Morbidity and Mortality Trials: Adverse event data were pooled from seven double-blind, placebo-controlled trials (West of Scotland Coronary Prevention study [WOS]; Cholesterol and Recurrent Events study [CARE]; Long-term Intervention with Pravastatin in Ischemic Disease study [LIPID]; Pravastatin Limitation of Atherosclerosis in the Coronary Arteries study [PLAC I]; Pravastatin, Lipids and Atherosclerosis in the Carotids study [PLAC II]; Regression Growth Evaluation Statin Study [REGRESS]; and Kuopio Atherosclerosis Prevention Study [KAPS]) involving a total of 10,764 patients treated with pravastatin 40 mg and 10,719 patients treated with placebo. The safety and tolerability profile in the pravastatin group was comparable to that of the placebo group. Patients were exposed to pravastatin for a mean of 4.0 to 5.1 years in WOS, CARE, and LIPID and 1.9 to 2.9 years in PLAC I, PLAC II, KAPS, and REGRESS. In these long-term trials, the most common reasons for discontinuation were mild, non-specific gastrointestinal complaints. Collectively, these seven trials represent 47,613 patient-years of exposure to pravastatin. Events believed to be of probable, possible, or uncertain relationship to study drug, occurring in at least 1% of patients treated with pravastatin in these studies are identified as follows: **Adverse Events in ≥1 Percent of Patients Treated with Pravastatin 40 mg in Long-Term Placebo-Controlled Trials [Pravastatin (N = 10,764) % of patients vs. Placebo (N = 10,719) % of patients] in each Body System/Event** *Cardiovascular:* Angina Pectoris (3.1 vs. 3.4); *Dermatologic:* Rash (2.1 vs. 2.2); *Gastrointestinal:* Dyspepsia/Heartburn (3.5 vs. 3.7); Abdominal Pain (2.4 vs. 2.5); Nausea/Vomiting (1.6 vs. 1.6); Flatulence (1.2 vs. 1.1); Constipation (1.2 vs. 1.3); *General:* Fatigue (3.4 vs. 3.3); Chest Pain (2.6 vs. 2.6); *Musculoskeletal:* Musculoskeletal Pain (includes arthralgia) (6.0 vs. 5.8); Muscle Cramp (2.0 vs. 1.8); Myalgia (1.4 vs. 1.4); *Nervous System:* Dizziness (2.2 vs. 2.1); Headache (1.9 vs. 1.8); Sleep Disturbance (1.0 vs. 0.9); Depression (1.0 vs. 1.0); Anxiety/Nervousness (1.0 vs. 1.2); *Renal/Genitourinary:* Urinary Abnormality (includes dysuria, frequency, nocturia) (1.0 vs. 0.8); *Respiratory:* Dyspnea (1.6 vs. 1.6); Upper Respiratory Infection (1.3 vs. 1.3); Cough (1.0 vs. 1.0); *Special Senses:* Vision Disturbance (includes blurred vision, diplopia) (1.6 vs. 1.3).

Events of probable, possible, or uncertain relationship to study drug that occurred in <1.0% of pravastatin-treated patients in the long-term trials included the following; frequencies were similar in placebo-treated patients: *Dermatologic:* pruritus, dermatitis, dryness of skin, scalp hair abnormality (including alopecia), urticaria. *Endocrine/Metabolic:* sexual dysfunction, libido change. *Gastrointestinal:* decreased appetite. *General:* fever, flushing. *Immunologic:* allergy, edema head/neck. *Musculoskeletal:* muscle weakness. *Nervous System:* paresthesia, vertigo, insomnia, memory impairment, tremor, neuropathy (including peripheral neuropathy). *Special Senses:* lens opacity, taste disturbance. **Postmarketing Experience:** In addition to the events reported above, as with other drugs in this class, the following events have been reported rarely during postmarketing experience with PRAVACHOL (pravastatin sodium), regardless of causality assessment: *Musculoskeletal:* myopathy, rhabdomyolysis. *Nervous System:* dysfunction of certain cranial nerves (including alteration of taste, impairment of extraocular movement, facial paresis), peripheral nerve palsy. *Hypersensitivity:* anaphylaxis, lupus erythematosus-like syndrome, polymyalgia rheumatica, dermatomyositis, vasculitis, purpura, hemolytic anemia, positive ANA, ESR increase, arthritis, arthralgia, asthenia, photosensitivity, chills, malaise, toxic epidermal necrolysis, erythema multiforme, including Stevens-Johnson syndrome. *Gastrointestinal:* pancreatitis, hepatitis, including chronic active hepatitis, cholestatic jaundice, fatty change in liver, cirrhosis, fulminant hepatic necrosis, hepatoma. *Dermatologic:* A variety of skin changes (e.g., nodules, discoloration, dryness of mucous membranes, changes to hair/nails). *Reproductive:* gynecomastia. *Laboratory Abnormalities:* elevated alkaline phosphatase, and bilirubin; thyroid function abnormalities. **Laboratory Test Abnormalities:** Increases in serum transaminase (ALT, AST) values and CPK have been observed (see **WARNINGS**). Transient, asymptomatic eosinophilia has been reported. Eosinophil counts usually returned to normal despite continued therapy. Anemia, thrombocytopenia, and leukopenia have been reported with HMG-CoA reductase inhibitors. **Concomitant Therapy:** Pravastatin has been administered concurrently with cholestyramine, colestipol, nicotinic acid, probucol and gemfibrozil. Preliminary data suggest that the addition of either probucol or gemfibrozil to therapy with lovastatin or pravastatin is **not** associated with greater reduction in LDL-cholesterol than that achieved with lovastatin or pravastatin alone. No adverse reactions unique to the combination or in addition to those previously reported for each drug alone have been reported. Myopathy and rhabdomyolysis (with or without acute renal failure) have been reported when another HMG-CoA reductase inhibitor was used in combination with immunosuppressive drugs, gemfibrozil, erythromycin, or lipid-lowering doses of nicotinic acid. Concomitant therapy with HMG-CoA reductase inhibitors and these agents is generally not recommended. (See **WARNINGS: Skeletal Muscle** and **PRECAUTIONS: Drug Interactions**.)

OVERDOSAGE: To date, there has been limited experience with overdosage of pravastatin. If an overdose occurs, it should be treated symptomatically with laboratory monitoring and supportive measures should be instituted as required. (See **WARNINGS**.)

REFERENCE: [1]Manson JM, Freyssinges C, Ducrocq MB, Stephenson WP. Postmarketing Surveillance of Lovastatin and Simvastatin Exposure During Pregnancy. *Reproductive Toxicology* 10(6):439-446, 1996.

D3-B001A-07-02
5154DIM19

Bristol-Myers Squibb Company
Princeton, NJ 08543 U.S.A.

Revised July 2002

Advertiser Directory

For information, circle the corresponding number(s) on the attached card, and mail or fax response to (585) 321-0043. Visit *Smithsonian* Reader Service ON-LINE at www.smithreader.com.

Travel

Lewis & Clark

1. Columbia & Snake River Sternwheeler Cruises. 7- and 11-night cruises from Portland, Oregon. Spacious staterooms, showboat entertainment, & fine dining. FREE color brochure. www.CruiseIntoHistory.com

2. Cruise West. Up-close, casual small-ship cruises range from Alaska's wilderness to Costa Rica & Panama. Visit www.cruisewest.com

3. Idaho Travel Council. Come to Idaho to see what Lewis saw and walk where Clark walked.

4. Oregon Tourism Commission. *Travel Oregon* Magazine offers readers first-hand accounts of great vacation opportunities around the state.

5. Travel Montana. The spirit of Lewis and Clark lives on in the unspoiled natural beauty of Montana.

6. West Virginia State Parks. Enjoy scenic splendor, outdoor adventure and historical sites at West Virginia State Parks. Visit us at www.wvparks.com

7. West Virginia Tourism. Get away to breathtaking landscapes, the finest dining and unforgettable adventures. Visit us at www.callwva.com

8. WV's Southern Gateway. Mercer County CVB–Experience opulent Bramwell and coal baron history. www.mccvb.com

9. Alberta. Canada's Rocky Mountain Playground! Discover your true self in Alberta. Visit TravelAlberta.com

10. Amelia Island Plantation. Florida's Premier Island Resort, offers oceanfront rooms & villas, championship golf, tennis, luxury spa, shopping & more. Visit www.aipfl.com

11. American Cruise Lines. Enjoy scenic and culturally enriching overnight cruises through inland waterways of the Eastern seaboard. www.americancruiselines.com

12. Arizona. A land defined by its wild beauty & its simple openness. By world-class resorts, dining & golf. Free Arizona Travel Packet. www.arizonaguide.com

13. Asheville, NC. Southern hospitality, mountain setting will charm you. Enjoy historic attractions, antiques, homemade crafts, outdoor adventures. www.ashevillechamber.org

14. Biltmore Estate, Asheville, NC. Request a free visit planner today and plan your escape to America's largest home.

15. California. Toast life and find yourself here in California. To find out more, go to www.visitcalifornia.com

16. Canadian Tourism Commission. Canada has every outdoor experience you can imagine! Visit www.travelcanada.ca/smith today.

17. Colonial Williamsburg. This vacation, do something different. Travel back in time. Request your FREE vacation planner. www.colonialwilliamsburg.org

18. Curacao. Great resorts, diving, casinos, shopping, beaches, golf, gourmet dining in a romantic setting. www.curacao-tourism.com

19. Dominican Republic. Discover breathtaking beaches, beautiful music & exquisite cuisine in a friendly atmosphere that will make your vacation the best ever. www.dominicana.com

20. Florida Keys & Key West. From sunken treasures and world-class diving, to art galleries, museums and festivals. Visit www.fla-keys.com

21. Hilton Head's Palmetto Dunes Resort. Hilton Head Island's premier ocean-front golf, tennis & beach destination. www.palmettodunesresort.com

22. Holland America's Europe. More time in port and gracious five star service. www.hollandamerica.com

23. Idaho. Great potatoes, tasty destinations. Plan your trip or order a travel guide at www.visitid.org

24. Kiawah Island. Great Beach Vacations. Fun 32-page Color Guides. kiawahtimes.com. AD #75Y.

25. London 2003. See London's diverse range of outstanding entertainment. For great offers, go to visitbritain.com/usa3

26. Luxury Ocean Cruising. Grand Hotel voyages aboard the ultra deluxe 500-passenger ocean liner. Global itineraries featuring free or low-cost air and more.

27. New Brunswick, Canada. World-renowned natural wonder...It's waiting for you in New Brunswick, Canada! Experience it today... www.TourismNewBrunswick.ca/naturally

28. Newfoundland & Labrador Tourism. For more information or to order your free travel guide, visit www.gov.nf.ca/tourism

29. New Mexico...Land of Enchantment. Put Yourself in a State of Enchantment.® www.newmexico.org

30. North Carolina. Enjoy natural beauty and outdoor adventure. Go to www.visitnc.com for a free travel guide.

31. Norwegian Cruise Line. With NCL's Freestyle Cruising℠, there is only one schedule — yours. With more restaurants to chose from than days of the week. www.ncl.com

32. Norwegian Tourist Board. Nature at its most spectacular. A land of cosmopolitan cities, charming towns, ancient Viking ships, breathtaking coastal voyages... www.visitnorway.com/us

33. Orient Lines. The Destination Cruise Specialists℠ offer award-winning CruiseTours℠ visiting all seven continents. Visit us at www.orientlines.com

34. Outer Banks of North Carolina. Home of the First Flight. Come experience the History and Mystery.

35. Pacific Delight Tours. Discover China & the Yangtze River in-depth and in style–plus other exciting destinations. www.PacificDelightTours.com

36. Peter Deilmann Danube Cruises. Cruise the Danube in 4- or 5-star luxury. Explore Budapest, Vienna, picturesque river ports...Castles and vineyards float by.

37. Peter Deilmann EuropAmerica Cruises. Sail past quaint villages, cities, and vineyards on a luxury European river cruise.

38. Radisson Seven Seas Cruises. Great value on award-winning luxury cruises. Visit www.rssc.com

39. Rentals in Europe. Villa, home and apartment rentals in France, Italy, U.K., Spain and Portugal. www.europeanhomerentals.com

40. Saga International. Enjoy classic cruising aboard Saga Rose and Saga Pearl—Exclusively for today's over-50's. www.sagaholidays.com

41. Sandals. Voted the best all-inclusive resort—offers the best of everything in Jamaica and the Turks & Caicos. www.sandals.com

42. South Carolina. Smiling Faces. Beautiful Places. Free Smiles & Places vacation kit. Visit www.DiscoverSouthCarolina.com

43. Texas Tourism. Send for a Free Texas travel guide with over 260 pages of helpful information or visit www.TravelTex.com

44. United States Virgin Islands. Sail along the three breathtaking islands of the United States Virgin Islands. For more information, visit www.vicl.org

45. Uniworld. Visit China and Yangtze River aboard deluxe ships of Victoria Cruises. Free Brochure. www.uniworld.com

46. Viking River Cruises. Viking River Cruises offers cruises on Europe's picturesque rivers. Includes air, meals, and daily sightseeing. www.vikingrivercruises.com

47. Virginia Tourism. Relive the events that helped shape our nation at Virginia's Civil War museums and battlefields.

48. Visit Florida. There's never been a better time to explore Florida. For Hot Florida Vacation Deals, visit www.flausa.com

A. ALL OF THE ABOVE CATEGORY

Apparel

49. Lands' End. www.landsend.com. The Direct Merchant that offers the best value and service for your clothing needs.

Automotive

50. Toyota. The gas/electric Prius. Earth's favorite hybrid vehicle that never needs to be plugged in. Prius/Genius. Toyota.com/prius. Get the feeling. Toyota.

Books

51. Edward R. Hamilton, Bookseller. Free Bargain Book Catalog offers quality hardcover books from $3.95. Huge selection. www.erhbooks.com/dds

Business/ Corporate

52. ADM. Nature has answers. Is anyone listening? Yes. ADM. Visit us at www.admworld.com

53. UPS–United Parcel Service of America, Inc. Ground, overnight and international. What can Brown do for you?℠ Find out at ups.com

B. ALL OF THE ABOVE CATEGORY

Expedia.com

Don't just travel. Travel Right.

Expedia.com makes it easy to find the trip you're looking for. Just log on to choose the right hotel or find the perfect flight. Expedia.com, Don't just travel. Travel Right.

Home

54. Hunter Fan Company. Hunter offers over 100 styles of high-performance ceiling fans for any decor. Visit www.hunterfan.com

55. Suter's Handcrafted Furniture. Suter's creates handcrafted furnishings in solid cherry, mahogany and walnut. Online catalog at www.suters.com

56. Trex Decking. It's amazing what you can dream up when you're not sealing or staining. Visit our web site or send for a free book of inspiration. www.trex.com

57. Vixen Hill. Factory direct modular cedar gazebos & screened garden houses pre-engineered for easy assembly by a noncarpenter.

C. ALL OF THE ABOVE CATEGORY

58. Marvin Windows. Visit Marvin on the Internet at www.marvin.com

Investment

59. American Century. Visit www.americancentury.com

60. T. Rowe Price. 401(k) rollovers made easy! Take more control of your retirement savings. Get the T. Rowe Price Rollover Advantage℠. troweprice.com

61. TIAA-CREF. Investment and insurance solutions to help you build the future you want and deserve. www.tiaa-cref.org

D. ALL OF THE ABOVE CATEGORY

Pharmaceutical

62. Aricept. For information on Alzheimer's disease and a treatment option, please visit www.aricept.com

63. Clarinex. Talk to your doctor about Clarinex (desloratadine) 5 mg tablets. For a free 7-day trial offer & important information, visit www.clarinex.com

64. Lipitor. Ask your doctor if Lipitor is right for you. For more information, visit www.lipitor.com

E. ALL OF THE ABOVE CATEGORY

Miscellaneous

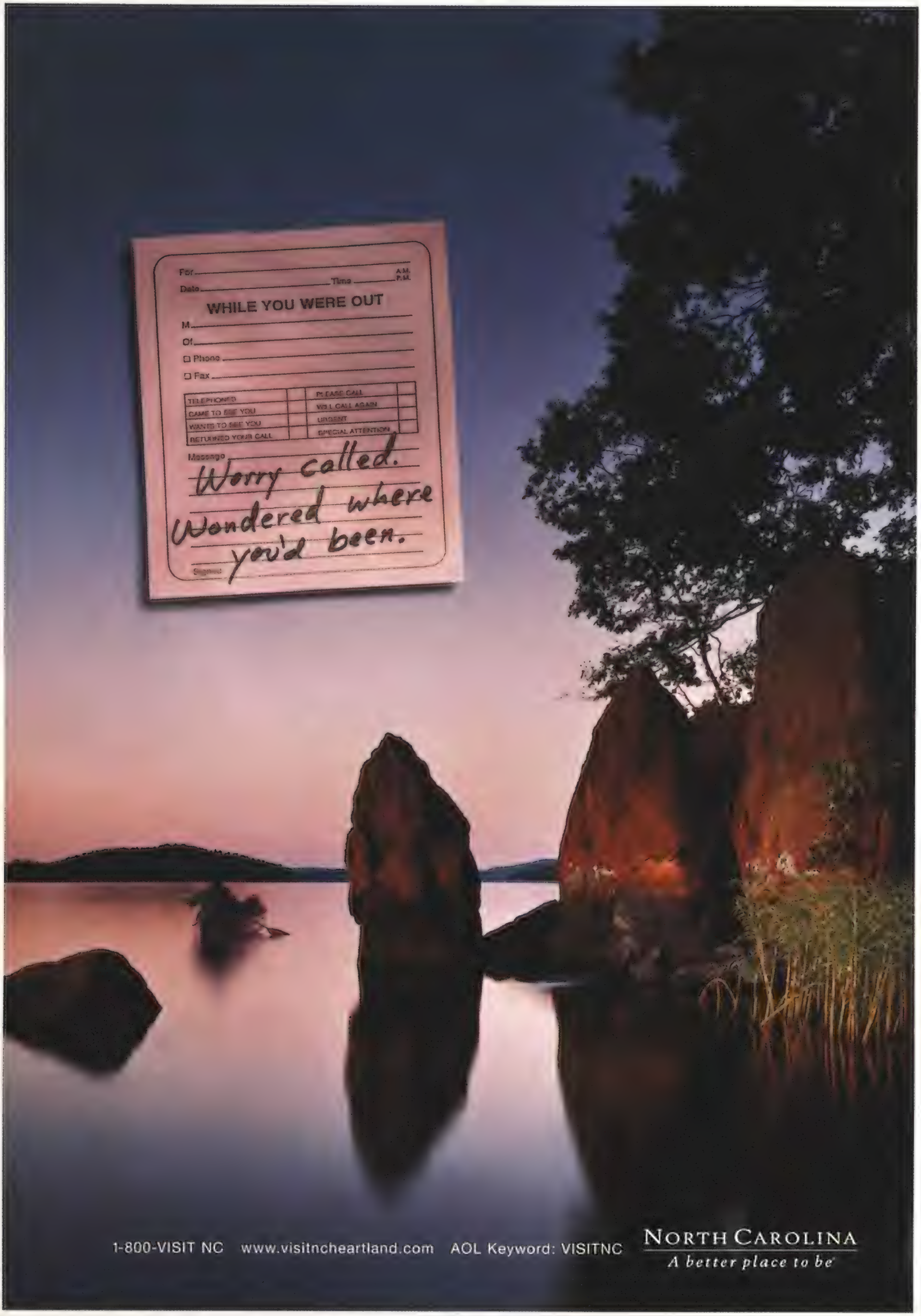
65. Baldwin Piano Inc. A Baldwin offers a unique combination of tradition, technology, precision and performance. www.baldwinpiano.com

66. Main Gem. Kissing Dolphin Heart plus 50 more jewelry items made in Maine. www.maingem.com

F. ALL OF THE ABOVE CATEGORY

G. ALL ADVERTISERS 1–66

Offer Expires May 31, 2003.


For
Date
Time
A.M.
P.M.
WHILE YOU WERE OUT
M
Of
Phone
Fax
TELEPHONED
CAME TO SEE YOU
WANTS TO SEE YOU
RETURNED YOUR CALL
PLEASE CALL
WILL CALL AGAIN
URGENT
SPECIAL ATTENTION
Message
Worry called. Wondered where you'd been.
Signed
1-800-VISIT NC
www.visitncheartland.com
AOL Keyword: VISITNC
NORTH CAROLINA
A better place to be

Pershing's Map

The general's war room map forever captures America's triumph on the Western Front

In this detail from Pershing's map, Allied troops—to the left of the line of red pins that mark the Western Front—prepared to deal a final blow to the Germans (right of red pins).

ON THIS FINE FALL MORNING, Beth Richwine pushes a cart laden with ladder, blue plastic gloves, notebook and other tools into an exhibit space that is in the final, noisy throes of completion. She stops in front of a low, black platform that will soon house the re-created war room of Gen. John J. Pershing, commander of the American Expeditionary Forces during World War I.

Now Richwine, a conservator at the National Museum of American History, is perched midway up the ladder, carefully pulling a plastic sheet from the rear wall to unveil a 1919 replica of the 9- by 10-foot, top secret map that Pershing kept locked in a cubicle in his war room in Chaumont, France. The map—studded with more than 2,000 hat pins, thumbtacks and paper tabs—looks more like a Fabergé egg than the state-of-the-art field intelligence it once was. Richwine's task this morning is to re-anchor the two dozen stray pins, tacks and tabs of paper that slipped off during the map's transit from the museum's suburban Maryland warehouse.

TOM WOLFE; BETTMANN / CORBIS

Pershing's map is one of more than 100 objects on display in a new exhibition, "West Point in the Making of America, 1802-1918." Marking the military academy's bicentennial, the exhibition examines the lives of its graduates who, as engineers and explorers, business and military leaders, influenced the building of this nation. Among them was Pershing, class of 1886. As commander of the largest American field army ever assembled up to that time, which at its height included almost two million men, he was lauded worldwide for bringing "the war to end all wars" to an end in 1918.

The map and its pins record—at the exact hour of the armistice—the position of Allied and German troops along the 450-mile Western Front that stretched from the Belgian coast to the Swiss border with France. By November 1918, Pershing's First Army, having ground through German opposition in the grueling Meuse-Argonne campaign, had advanced northward to Sedan, France. The American forces stood poised to deliver a final, crushing blow to the Germans, an attack planned for November 14 but trumped

by the signing of the armistice on November 11. Now and forever, in the fateful moment captured by the map, the Germans are under heavy artillery fire and on the verge of collapse, their hold on Sedan loosened and their railway supply system breached.

Pershing's map, for the first time ever, provided a systematic way of gathering and translating intelligence into one central battlefield picture. Allied officers who saw the map declared it the most accurate representation of the opposing forces they had ever seen. Time has not diminished the map's capacity to inspire respect. "I get excited just looking at it, knowing that in all previous wars this kind of intelligence activity simply didn't happen," says Brig. Gen. John S. Brown of the U.S. Army Center of Military History. "It was a brilliant innovation, an absolute conceptual leap forward. Pershing's techniques for managing intelligence and forces on this scale were no different from those used during Operation Desert Storm."

Pershing himself described the map as "pleasing to the eye": a tight and meandering column of red hat pins delineates the front line. From there rows of pins fan out laterally like leafless branches to mark the boundaries between the corps of the Allied and German armies. Thumbtacks, many hugging the front line, are color-coded to show each division's condition—white for tired, blue for fresh. Each tack holds down a colored paper tag printed with the division's number. On the Allied side of the front, solid red tags mark the American divisions, while on the enemy's side a tag's color relays a division's fighting reputation.

When the war ended, Pershing offered the map to the museum, writing: "It is my opinion that the public display of this map will help in developing national pride." Pershing, who died in 1948, noted by way of example that the U.S. forces held 16 miles more of the front at the time of the armistice than did the British. "This fact, though not generally known, is very evident on the map," he observed.

Pershing's words were prophetic. When visitors first saw the map at the Smithsonian in 1919, many considered it second in historical importance only to the Star-Spangled Banner, flown at Fort McHenry during the War of 1812. "The map would have been galvanizing," Brown says. "For 200 years the Europeans viewed us as incapable of competing. They were disparaging of our military and organizational abilities. Then, in a brief time—just a year—we went from noncombatant to victor. The map evoked it all."

Now, 83 years later, Richwine scans the Western Front for pinless pinholes. In the upper right corner of the map, in the area of the North Sea, she spots what for a conservator is the real enemy. "See those red patches? That's insect damage," she says. Silverfish with a taste for wheat-based paste have eaten through the map to reveal the mount board beneath; had the bugs attacked the front itself, the missing bits would have to be painted in. Suddenly, a colleague walks by, and seeing her poised to replace a pin, calls out, "If you don't do this right, Beth, we could lose the war!" —*VICTORIA DAWSON*

"West Point in the Making of America" is on view at the National Museum of American History until January 2004. For more exhibition information, visit www.americanhistory.si.edu/westpoint.

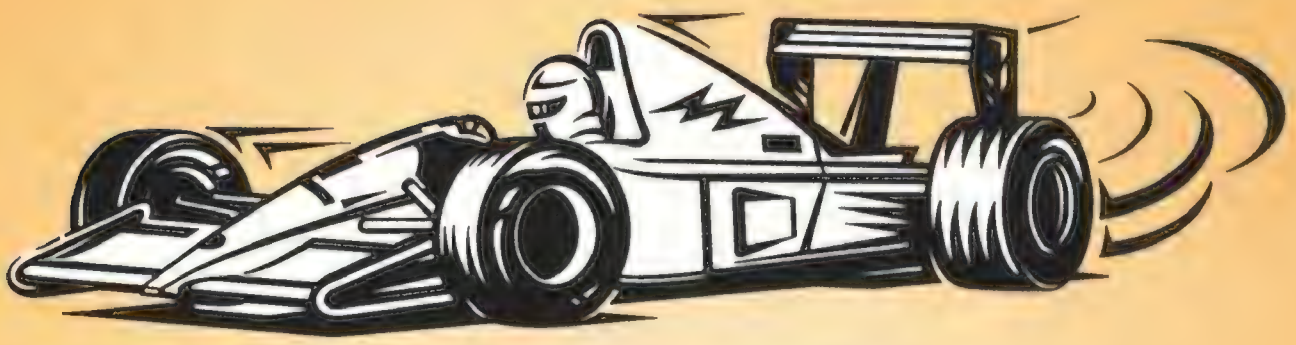
STREETCAR RIDE TO HISTORY

It was a spectral sight, the 4 a.m. delivery in Washington, D.C. of a 1959 Chicago Transit Authority railcar for a new transportation exhibition that will open in November at the National Museum of American History. Once, the car rumbled along Chicago's "L" loop; now, repainted, protectively sheathed in plastic and stowed on a flatbed trailer, it slid through the empty avenues of the nation's capital toward its hereafter in the museum. The truck backed up to 18-foot-high glass doors that open on the building's east side; then riggers hoisted the 22,000-pound car into the hall, which is still under construction. Eight hours after arrival, the car was in place. Said collections manager Shari Stout: "There was a lot of anxiety for a lot of people." —*VICTORIA DAWSON*

REGIS LEFEBURE (2)

©Nestlé

Your pace.



Your driver.

How do you stay ahead of the race? It's easy with the rich roast flavor and aroma of Taster's Choice® coffee. It'll get you where you want to go. A little quicker.

www.TastersChoice.com

Advantage You.™

America's First Stamps

An exhibition of priceless stamps opens a window on American life in the 1800s

WILSON HULME, the National Postal Museum's curator of philately, places a folder on a table in the museum's research library and carefully opens the jacket. Neither snow nor rain nor heat nor gloom of night could dampen his pleasure.

"There isn't a collector I've ever met who wouldn't kill to own these," says Hulme. "They're priceless." Spread out before him are the magic beans that grew into the modern Postal Service: two uncut sheets of stamps, the first ever issued by the U.S. government. The sheets, or "panes," as philatelists call them, were printed in 1847 and bear, respectively, 100 identical images of Benjamin Franklin and George Washington. "Specimen" is emblazoned across the face of each stamp, identifying the panes as part of a printer's sample book. The only complete panes of 1847 stamps known to exist, they were discovered six years ago in a book of engraver's proofs found in the archives of the American Bank Note Company in New York City, a successor to the original printer. Now the panes are featured in "The 1847s: America's First Stamps," an exhibition at the National Postal Museum. Hulme says this may be the largest collection of 1847s ever displayed.

In 1849, when this letter traveled from Buffalo to Scotland, the rate to Britain was 24 cents. The sender overpaid by a penny (the price of a newspaper back then), affixing two 10 cent Washingtons and a 5 cent Franklin (insets, left). Today the postage would be 80 cents.

"I get thrilled looking at this stuff," says Hulme, himself an avid collector. (How avid? Well, put it this way: he will talk longer than you probably care to listen about the machines made to perforate stamps.)

U.S. mail service was a model of inefficiency and inconvenience before 1847. (No wisecracks, please, about the years since.) There was no pick up or delivery for residences until private companies stepped in. Postage was usually paid by the recipient, the amount due based on the weight, number of pages and distance traveled. And if the recipient refused, as often happened, the post office had to assume the cost.

The new, prepaid Franklin and Washington stamps simplified the process considerably. A 5 cent Franklin was good for any half-ounce letter sent within a 300-mile radius; a 10 cent Washington carried that same letter to all points beyond. (Yes, 5 and 10 cents was a lot of money back then

NATIONAL POSTAL MUSEUM (3); JOHN WRONN / MUSEUM OF MODERN ART, NY

HURRY IN

After garnering rave reviews in New York and San Francisco, "Gerhard Richter: 40 Years of Painting" finishes its tour at the Hirshhorn Museum and Sculpture Garden, closing May 18. The 71-year-old German artist defies categorization: his influential paintings include abstracts, portraits, photo-like still lifes and landscapes such as *Meadowland* (1985), left.

"Hey Pollen, remember how easy it used to be to make her nose run and her eyes water?"
"Yeah Ragweed, Allegra really messed things up for us."

Sometimes it seems your seasonal allergies want to make you miserable in as many ways as they can. That's when you need the multi-symptom relief of Allegra. Allegra is specifically designed to block the histamine that triggers allergic responses like runny nose, itchy eyes and scratchy throat. Which may be one reason it's the number one prescription antihistamine. Allegra is for people 12 and older. Side effects are low and may include headache, cold or back pain. Talk to your doctor about Allegra.

Allegra. So Much Relief for So Many Symptoms.

For more information call 1-800-allegra. Join the extras program @ allegra.com.
Please see additional important information on next page.

Aventis © 2003 Aventis Pharmaceuticals Inc. ALG-JA-6368-1

Brief Summary of Prescribing Information as of November 2000

ALLEGRA®

(fexofenadine hydrochloride)

Capsules and Tablets

INDICATIONS AND USAGE

Seasonal Allergic Rhinitis

ALLEGRA is indicated for the relief of symptoms associated with seasonal allergic rhinitis in adults and children 6 years of age and older. Symptoms treated effectively were sneezing, rhinorrhea, itchy nose/palate/throat, itchy/watery/red eyes.

Chronic Idiopathic Urticaria

ALLEGRA is indicated for treatment of uncomplicated skin manifestations of chronic idiopathic urticaria in adults and children 6 years of age and older. It significantly reduces pruritus and the number of wheals.

CONTRAINDICATIONS

ALLEGRA is contraindicated in patients with known hypersensitivity to any of its ingredients.

PRECAUTIONS

Drug Interaction with Erythromycin and Ketoconazole

Fexofenadine hydrochloride has been shown to exhibit minimal (ca. 5%) metabolism. However, co-administration of fexofenadine hydrochloride with ketoconazole and erythromycin led to increased plasma levels of fexofenadine hydrochloride. Fexofenadine hydrochloride had no effect on the pharmacokinetics of erythromycin and ketoconazole. In two separate studies, fexofenadine hydrochloride 120 mg twice daily (two times the recommended twice daily dose) was co-administered with erythromycin 500 mg every 8 hours or ketoconazole 400 mg once daily under steady-state conditions to normal, healthy volunteers (n=24, each study). No differences in adverse events or QT_c interval were observed when patients were administered fexofenadine hydrochloride alone or in combination with erythromycin or ketoconazole. The findings of these studies are summarized in the following table:

Effects on steady-state fexofenadine hydrochloride pharmacokinetics after 7 days of co-administration with fexofenadine hydrochloride 120 mg every 12 hours (two times the recommended twice daily dose) in normal volunteers (n=24)

Concomitant Drug	C_{maxSS} *(Peak plasma concentration)*	$AUC_{SS(0\text{-}12h)}$ *(Extent of systemic exposure)*
Erythromycin (500 mg every 8 hrs)	+82%	+109%
Ketoconazole (400 mg once daily)	+135%	+164%

The changes in plasma levels were within the range of plasma levels achieved in adequate and well-controlled clinical trials.

The mechanism of these interactions has been evaluated in *in vitro*, *in situ*, and *in vivo* animal models. These studies indicate that ketoconazole or erythromycin co-administration enhances fexofenadine gastrointestinal absorption. *In vivo* animal studies also suggest that in addition to increasing absorption, ketoconazole decreases fexofenadine hydrochloride gastrointestinal secretion, while erythromycin may also decrease biliary excretion.

Drug Interactions with Antacids

Administration of 120 mg of fexofenadine hydrochloride (2 x 60 mg capsule) within 15 minutes of an aluminum and magnesium containing antacid (Maalox®) decreased fexofenadine AUC by 41% and C_{max} by 43%. ALLEGRA should not be taken closely in time with aluminum and magnesium containing antacids.

Carcinogenesis, Mutagenesis, Impairment of Fertility

The carcinogenic potential and reproductive toxicity of fexofenadine hydrochloride were assessed using terfenadine studies with adequate fexofenadine hydrochloride exposure (based on plasma area-under-the-concentration vs. time [AUC] values). No evidence of carcinogenicity was observed in an 18-month study in mice and in a 24-month study in rats at oral doses up to 150 mg/kg of terfenadine (which led to fexofenadine exposures that were respectively approximately 3 and 5 times the exposure from the maximum recommended daily oral dose of fexofenadine hydrochloride in adults and children).

In *in vitro* (Bacterial Reverse Mutation, CHO/HGPRT Forward Mutation, and Rat Lymphocyte Chromosomal Aberration assays) and *in vivo* (Mouse Bone Marrow Micronucleus assay) tests, fexofenadine hydrochloride revealed no evidence of mutagenicity.

In rat fertility studies, dose-related reductions in implants and increases in postimplantation losses were observed at an oral dose of 150 mg/kg of terfenadine (which led to fexofenadine hydrochloride exposures that were approximately 3 times the exposure of the maximum recommended daily oral dose of fexofenadine hydrochloride in adults).

Pregnancy

Teratogenic Effects: Category C. There was no evidence of teratogenicity in rats or rabbits at oral doses of terfenadine up to 300 mg/kg (which led to fexofenadine exposures that were approximately 4 and 31 times, respectively, the exposure from the maximum recommended daily oral dose of fexofenadine in adults). There are no adequate and well controlled studies in pregnant women. Fexofenadine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nonteratogenic Effects. Dose-related decreases in pup weight gain and survival were observed in rats exposed to an oral dose of 150 mg/kg of terfenadine (approximately 3 times the maximum recommended daily oral dose of fexofenadine hydrochloride in adults based on comparison of fexofenadine hydrochloride AUCs).

Nursing Mothers

There are no adequate and well-controlled studies in women during lactation. Because many drugs are excreted in human milk, caution should be exercised when fexofenadine hydrochloride is administered to a nursing woman.

Pediatric Use

The recommended dose in patients 6 to 11 years of age is based on cross-study comparison of the pharmacokinetics of ALLEGRA in adults and pediatric patients and on the safety profile of fexofenadine hydrochloride in both adult and pediatric patients at doses equal to or higher than the recommended doses.

The safety of ALLEGRA tablets at a dose of 30 mg twice daily has been demonstrated in 438 pediatric patients 6 to 11 years of age in two placebo-controlled 2-week seasonal allergic rhinitis trials. The safety of ALLEGRA for the treatment of chronic idiopathic urticaria in patients 6 to 11 years of age is based on cross-study comparison of the pharmacokinetics of ALLEGRA in adult and pediatric patients and on the safety profile of fexofenadine in both adult and pediatric patients at doses equal to or higher than the recommended dose.

The effectiveness of ALLEGRA for the treatment of seasonal allergic rhinitis in patients 6 to 11 years of age was demonstrated in one trial (n=411) in which ALLEGRA tablets 30 mg twice daily significantly reduced total symptom scores compared to placebo, along with extrapolation of demonstrated efficacy in patients ages 12 years and above, and the pharmacokinetic comparisons in adults and children. The effectiveness of ALLEGRA for the treatment of chronic idiopathic urticaria in patients 6 to 11 years of age is based on an extrapolation of the demonstrated efficacy of ALLEGRA in adults with this condition and the likelihood that the disease course, pathophysiology and the drug's effect are substantially similar in children to that of adult patients.

The safety and effectiveness of ALLEGRA in pediatric patients under 6 years of age have not been established.

Geriatric Use

Clinical studies of ALLEGRA tablets and capsules did not include sufficient numbers of subjects aged 65 years and over to determine whether this population responds differently from younger patients. Other reported clinical experience has not identified differences in responses between the geriatric and younger patients. This drug is known to be substantially excreted by the kidney, and the risk of toxic reactions to this drug may be greater in patients with impaired renal function. Because elderly patients are more likely to have decreased renal function, care should be taken in dose selection, and may be useful to monitor renal function. (See CLINICAL PHARMACOLOGY)

ADVERSE REACTIONS

Seasonal Allergic Rhinitis

Adults. In placebo-controlled seasonal allergic rhinitis clinical trials in patients 12 years of age and older, which included 2461 patients receiving fexofenadine hydrochloride capsules at doses of 20 mg to 240 mg twice daily, adverse events were similar in fexofenadine hydrochloride and placebo-treated patients. All adverse events that were reported by greater than 1% of patients who received the recommended daily dose of fexofenadine hydrochloride (60 mg capsules twice daily), and that were more common with fexofenadine hydrochloride than placebo, are listed in Table 1.

In a placebo-controlled clinical study in the United States, which included 570 patients aged 12 years and older receiving fexofenadine hydrochloride tablets at doses of 120 or 180 mg once daily, adverse events were similar in fexofenadine hydrochloride and placebo-treated patients. Table 1 also lists adverse experiences that were reported by greater than 2% of patients treated with fexofenadine hydrochloride tablets at doses of 180 mg once daily and that were more common with fexofenadine hydrochloride than placebo. The incidence of adverse events, including drowsiness, was not dose-related and was similar across subgroups defined by age, gender, and race.

Table 1

Adverse experiences in patients ages 12 years and older reported in placebo-controlled seasonal allergic rhinitis clinical trials in the United States

Twice daily dosing with fexofenadine capsules at rates of greater than 1%

Adverse experience	*Fexofenadine 60 mg Twice Daily (n=679)*	*Placebo Twice Daily (n=671)*
Viral Infection (cold, flu)	2.5%	1.5%
Nausea	1.6%	1.5%
Dysmenorrhea	1.5%	0.3%
Drowsiness	1.3%	0.9%
Dyspepsia	1.3%	0.6%
Fatigue	1.3%	0.9%

Once daily dosing with fexofenadine hydrochloride tablets at rates of greater than 2%

Adverse experience	*Fexofenadine 180 mg once daily (n=283)*	*Placebo (n=293)*
Headache	10.6%	7.5%
Upper Respiratory Tract Infection	3.2%	3.1%
Back Pain	2.8%	1.4%

The frequency and magnitude of laboratory abnormalities were similar in fexofenadine hydrochloride and placebo-treated patients.

Pediatric. Table 2 lists adverse experiences in patients aged 6 to 11 years of age which were reported by greater than 2% of patients treated with fexofenadine hydrochloride tablets at a dose of 30 mg twice daily in placebo-controlled seasonal allergic rhinitis studies in the United States and Canada that were more common with fexofenadine hydrochloride than placebo.

Table 2

Adverse experiences reported in placebo-controlled seasonal allergic rhinitis studies in pediatric patients ages 6 to 11 in the United States and Canada at rates of greater than 2%

Adverse experience	*Fexofenadine 30 mg twice daily (n=209)*	*Placebo (n=229)*
Headache	7.2%	6.6%
Accidental Injury	2.9%	1.3%
Coughing	3.8%	1.3%
Fever	2.4%	0.9%
Pain	2.4%	0.4%
Otitis Media	2.4%	0.0%
Upper Respiratory Tract Infection	4.3%	1.7%

Chronic Idiopathic Urticaria

Adverse events reported by patients 12 years of age and older in placebo-controlled chronic idiopathic urticaria studies were similar to those reported in placebo-controlled seasonal allergic rhinitis studies. In placebo-controlled chronic idiopathic urticaria clinical trials, which included 726 patients 12 years of age and older receiving fexofenadine hydrochloride tablets at doses of 20 to 240 mg twice daily, adverse events were similar in fexofenadine hydrochloride and placebo-treated patients. Table 3 lists adverse experiences in patients aged 12 years and older which were reported by greater than 2% of patients treated with fexofenadine hydrochloride 60 mg tablets twice daily in controlled clinical studies in the United States and Canada and that were more common with fexofenadine hydrochloride than placebo. The safety of fexofenadine hydrochloride in the treatment of chronic idiopathic urticaria in pediatric patients 6 to 11 years of age is based on the safety profile of fexofenadine hydrochloride in adults and adolescent patients at doses equal to or higher than the recommended dose (see Pediatric Use).

Table 3

Adverse experiences reported in patients 12 years and older in placebo-controlled chronic idiopathic urticaria studies in the United States and Canada at rates of greater than 2%

Adverse experience	*Fexofenadine 60 mg twice daily (n=186)*	*Placebo (n=178)*
Back Pain	2.2%	1.1%
Sinusitis	2.2%	1.1%
Dizziness	2.2%	0.6%
Drowsiness	2.2%	0.0%

Events that have been reported during controlled clinical trials involving seasonal allergic rhinitis and chronic idiopathic urticaria patients with incidences less than 1% and similar to placebo and have been rarely reported during postmarketing surveillance include: insomnia, nervousness, and sleep disorders or paroniria in rare cases, rash, urticaria, pruritus and hypersensitivity reactions with manifestations such as angioedema, chest tightness, dyspnea, flushing and systemic anaphylaxis have been reported.

OVERDOSAGE

Reports of fexofenadine hydrochloride overdose have been infrequent and contain limited information. However, dizziness, drowsiness, and dry mouth have been reported. Single doses of fexofenadine hydrochloride up to 800 mg (six normal volunteers at this dose level), and doses up to 690 mg twice daily for 1 month (three normal volunteers at this dose level) or 240 mg once daily for 1 year (234 normal volunteers at this dose level) were administered without the development of clinically significant adverse events as compared to placebo.

In the event of overdose, consider standard measures to remove any unabsorbed drug. Symptomatic and supportive treatment is recommended.

Hemodialysis did not effectively remove fexofenadine hydrochloride from blood (1.7% removed) following terfenadine administration.

No deaths occurred at oral doses of fexofenadine hydrochloride up to 5000 mg/kg in mice (110 times the maximum recommended daily oral dose in adults and 200 times the maximum recommended daily oral dose in children based on mg/m²) and up to 5000 mg/kg in rats (230 times the maximum recommended daily oral dose in adults and 400 times the maximum recommended daily oral dose in children based on mg/m²). Additionally, no clinical signs of toxicity or gross pathological findings were observed. In dogs, no evidence of toxicity was observed at oral doses up to 2000 mg/kg (300 times the maximum recommended daily oral dose in adults and 530 times the maximum recommended daily oral dose in children based on mg/m²).

Prescribing Information as of November 2000

Aventis Pharmaceuticals Inc.
Kansas City, MO 64137 USA
US Patents 4,254,129; 5,375,693; 5,578,610
www.allegra.com
a8b1100Aa ALG-JA-6368-1

Aventis

"With each pass of the chisel, a new form emerges, giving life to an old family tradition."

- Luis Barela, wood carver

In a land filled with endless natural beauty, inspiration comes in many forms. See how New Mexico's rich cultural heritage fuels your fire of self-expression.

Put Yourself in a State of Enchantment.®

NEW MEXICO
LAND OF ENCHANTMENT

For your free New Mexico Vacation Guide call 1-800-733-6396 ext. 2355 www.newmexico.org

when a day's pay was a dollar; the service's inefficiency was costly. In 1851, rates dropped to 3 cents for anything sent up to 3,000 miles.)

Envelopes and folded letters—known as covers—that bear the 1847 stamps are highly prized. Between 1955 and 2000, researchers tracked down every 1847 cover known to exist—all 12,961. The exhibition displays 155 of them. Philatelists revel in their details: some towns used their own postmarks; some postmasters added handwritten notations, such as "steam" to denote letters traveling by steamboat; cancellations were done in a rainbow of inks.

But you don't have to be a stamp junkie to appreciate the significance of the 1847s. There was no federal currency then, no standing army. America was feeling its way as a republic. The Washington and Franklin stamps, says Hulme, "were a means of communication that eventually bound the nation together. There's so much history that can be learned from the delivery of the mail."

The stamps were pulled from service in 1851, and the government ordered the New York printer, Rawdon, Wright, Hatch & Edson, to destroy the plates. Some eagle-eyed philatelists, however, insist that the engraved image of Benjamin Franklin, its microscopic scratches as distinctive as a fingerprint, appears on company samples printed in the 1880s. Did an employee hold on to the master die? Could it even today be lying forgotten in a company vault? Or serving as somebody's novelty paperweight?

"Collectors would be thrilled to find that die," says Hulme. "It would be the find of the century. And we'd be delighted to exhibit it." —*TOM DUNKEL*

"The 1847s: America's First Stamps" is at the National Postal Museum through June 8, 2003.

FROM THE ATTIC

CAIRO KAFFEEKLATSCH Charles Lang Freer, the bearded Detroit industrialist turned art collector (second from left), couldn't read Greek. Yet somehow he knew that the $7,750 he was laying out for a bundle of ancient Greek manuscripts that December day in 1906 would be money well spent. Freer was on a roll. In January, the Smithsonian's Board of Regents had unanimously accepted his collection of Asian and American ceramics and paintings, creating the Institution's first art museum. Now on a quest to improve his holdings, Freer was touring Egypt with his personal physician, Frederick Mann (far left), and his dragoman, or interpreter (standing). "The manuscripts carried me completely off my feet," Freer wrote his business partner, Col. Frank J. Hecker, after seeing them at the shop of Giza antiquities merchant Ali Arabi (hookah in hand). "He's a marvelous old scamp, who calls me 'of his family.'" Freer's instincts were correct; he had bought the third-oldest parchment manuscript of the Gospels. A new book, *A Collector's Journey: Charles Lang Freer and Egypt*, by Ann C. Gunter, associate curator of ancient Near Eastern art, recounts Freer's tour. —*BETH PY-LIEBERMAN*

FREER GALLERY OF ART, SMITHSONIAN INSTITUTION

VISIT THE SMITHSONIAN For a free Associates' planning packet, call Smithsonian Information, 202-357-2700 or 202-357-1729 (TTY), 9 a.m.-5 p.m., Monday through Saturday, or send an e-mail to info@si.edu. **INFORMATION CENTER:** Upon arrival, stop at the Smithsonian Information Center in the Castle (9 a.m.-5:30 p.m.). Most museums are open daily, 10 a.m.-5:30 p.m., except December 25. Members are invited to drop by the reception desk (9 a.m.-4 p.m.) to register for a behind-the-scenes tour and to hear about membership benefits.

JUST LOOKING

SWEET SORROW The doomed space shuttle *Columbia*'s flight deck was photographed in 2001 by Smithsonian's Eric Long and Mark Avino for a National Air and Space Museum book, *At the Controls* (distributed by Firefly Books Ltd.). The image and other photographs from the book, all of aviation cockpits, are now touring the United States. This month, the collection is on display at the North Carolina Museum of Life and Science in Durham and at the Aviation Museum of Kentucky in Lexington. Visit www.sites.si.edu for information on other cities where the exhibition will appear. The picture is available as a poster from Parker Publications, P.O. Box 483, North Salem, NY, 10560, or at the Web site shuttleposter@yoursmithsonian.com.

Smithsonian

THE HUNT FOR HOT STUFF

In the former Soviet Union, "rad rangers" are racing to find lost radiation devices before terrorists can turn them into "dirty bombs"

BY RICHARD STONE *ILLUSTRATIONS BY STEVE McCRACKEN*

LERRY MESKHI AND I walk into the maw of an artificial hill, one of several missile bunkers on this derelict Soviet military base near Tbilisi, the Republic of Georgia's capital. As our eyes adjust to the darkness, we follow rusty train tracks into pitch-black catacombs. Using a flashlight and feeling a touch of trepidation, I peer into one of the room-size chambers off the trackway. It's empty, the warheads, reportedly nuclear missiles once pointed at Turkey, long gone. Still, the old Soviet spirit lingers in yellow Russian signs on the concrete walls. "Operations shall be carried out only on command," says one. "Do not allow the product to be hit," says another. But Meskhi, chief of Georgia's Nuclear and Radiation Safety Service, isn't interested in Cold War signage. He's searching for other things the Soviets might have left behind, and he's hoping to get to them before others do.

He walks out of the dark bunker and into the sunlight, blinking like a mole. A gray-haired, cherub-faced 56-year-old, Meskhi is a local leader of the international effort to hunt down radioactive relics scattered across the frontier of the former USSR. Georgia and other nations, including the United States, are concerned that terrorists could rig stray radioactive materials to conventional explosives to create a "radiation dispersal device," also known as a dirty bomb.

As far as anyone knows, a dirty bomb has never been detonated. But the Justice Department said last June that U.S. agents had foiled an alleged Al Qaeda plan to obtain materials for a dirty bomb to be set off on U.S. soil. And the BBC reported in late January that British officials have evidence that Al Queda operatives in western Afghanistan had succeeded in building a dirty bomb. At its worst, some experts say, a dirty bomb attack might be comparable to a radiation accident, perhaps like the one in Brazil in 1987, when more than 200 people were exposed—4 fatally—to radioactive cesium 137 from an abandoned radiation therapy machine. Also, U.S. Army medical planners say that a dirty bomb could make victims more susceptible to a subsequent biological or chemical weapon, because exposure to large amounts of ionizing radiation can suppress the immune system.

But assessing the consequences of a detonated dirty bomb is difficult. Some security experts say it would probably not expose many people to a deadly or harmful dose of radioactivity; that is, the injuries would be from the blast itself. Instead, they say, dirty bombs are designed to generate panic,

A TECHNICIAN POINTED TO RUSTING AERIAL BOMBS AND A ROCKET FRAGMENT IN A DITCH, HALF-SUBMERGED LIKE BATHING HIPPOS.

preying on people's fear of all things radioactive, and to contaminate buildings or neighborhoods, which might have to be decontaminated or razed at great expense. As one journalist put it, a dirty bomb is a weapon not of mass destruction but mass dislocation. A University of Rochester radiation safety expert estimates that more people would be killed in car accidents fleeing a dirty bomb blast in a panic than would be harmed by the unloosed radiation. "We should keep our eye on the ball," says Matthew Bunn, a nonproliferation expert at Harvard University's Belfer Center for Science and International Affairs. "Radiological terrorism could be expensive to clean up, but it would not mean tens of thousands of people dead and the heart of a major city incinerated in a flash, as would terrorist use of an actual nuclear weapon."

Nonetheless, many nations as well as scientific and political organizations view the dirty bomb threat as credible and grave. The International Atomic Energy Agency (IAEA), a United Nations body that serves as the world's nuclear watchdog, has in recent years dispatched officials and technicians to more than two dozen nations to secure orphaned radiation sources, including abandoned military and agricultural equipment. In Georgia, which has been in the forefront of radiation-hunting by former Soviet states, technicians have scoured urban areas and abandoned military bases—around 15 percent of the country—gathering up some 220 orphaned radioactive objects. Most, like rifle scopes that contain a trace of radium, were trivial; but some, including radioactive generators that nearly killed three civilians, were diabolically hot.

On my trip to Georgia in October, I spent three days with Meskhi and a team of radiation technicians—"rad rangers," I call them—that searched the countryside and, for the first time, allowed journalists to observe the work. The visit impressed upon me the vast scale of the orphan-radiation problem and the dangers that these ill-paid workers endure to make life a little safer for the rest of us.

Meskhi's crew—all men—know they're playing radioactive roulette when they poke into crumbling buildings and wander across rural expanses in pursuit of outdated, perhaps faulty equipment laden with hazardous radioactive compounds. As a hedge against acute radiation illness and possible delayed effects like cancer, each man wears a bright green plastic dosimeter around his neck like a talisman. The device measures cumulative gamma radiation, and when a set limit is reached, a rad ranger's stint is up. If a team encounters a device that might be potently radioactive, the older workers approach it first, covering it with a lead shield before letting others get close. "When we find big sources, we don't use young men," says Giga Basilia of Georgia's Radiation Service. "They have families to raise."

As I accompany Basilia and others while they comb the southern perimeter of the Vaziani military base, the crack of gunfire from beyond a nearby hill makes me flinch. Those are practice rounds, Basilia says, from a camp not far away. The U.S. military is training Georgian soldiers reportedly to fight Chechen rebels holed up in the Pankisi Gorge bordering Chechnya. Georgia, which gained independence with the fall of the Soviet Union in 1991, has cultivated close ties with the United States, which is seeking to increase its influence in this impoverished region between the Black Sea and the oil-rich Caspian Sea.

"Look at this!" exclaims one of the rangers, who had wandered over to a pit roughly 30 feet wide, half that in depth, and with perhaps a few feet of stagnant water pooled in the bottom. What catches the eye are two rusting aerial bombs and the bottom segment of some sort of finned rocket, all half-submerged like bathing hippos. The usually gregarious Georgians are at a loss for words. I'm looking suspiciously at gas bubbling up near the bombs when Basilia says, "I have no idea what this is. It's something unusual. We didn't know these were here."

One man—wearing, incongruously, a black Pittsburgh Steelers vest—walks over to the pit and lowers a digital Geiger counter on a strap over the edge. It dangles a few yards over the bombs, which, it turns out, are not nuclear arms. "Sixty-five, sixty-four," he says, reciting the Geiger counter readout. "Very low."

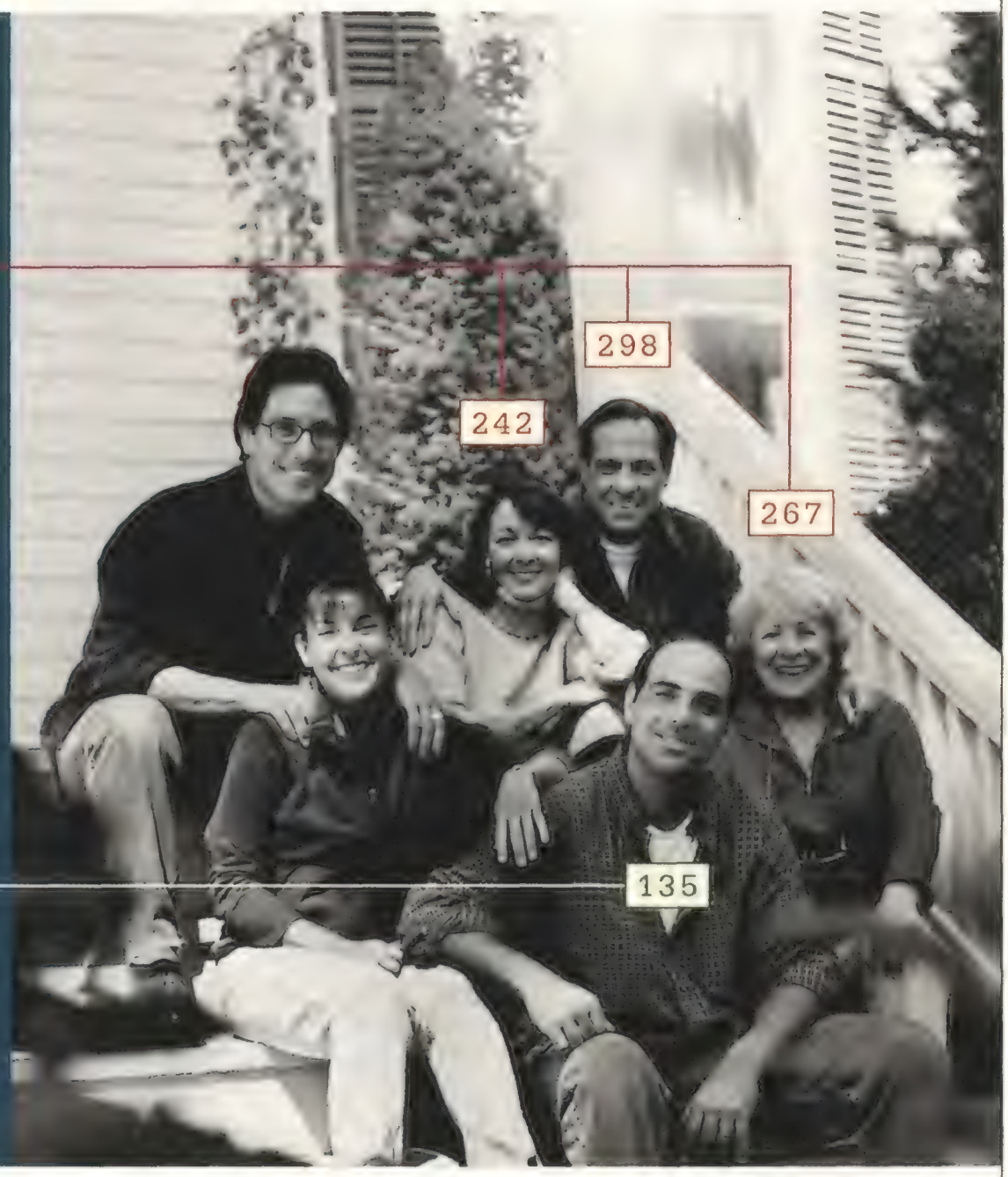
THE IAEA REDOUBLED ITS EFFORTS to find radioactive junk after a crisis at a former Soviet military base in Georgia nearly six years ago. During the Cold War, the Lilo Training Center, also on the outskirts of Tbilisi, prepared troops for the aftermath of a nuclear strike. Soldiers there conducted undisclosed exercises and tests in a mock postapocalyptic environment. Soon after Georgia's independence, Russia transferred the barracks to the Georgian

---

RICHARD STONE is the European news editor for Science. *He last wrote for* SMITHSONIAN *about Lake Vostok in July 2000.*

Family history
of high cholesterol.

Rewriting history.



Important information:

LIPITOR® (atorvastatin calcium) is a prescription drug used with diet to lower cholesterol. LIPITOR is not for everyone, including those with liver disease or possible liver problems, women who are nursing, pregnant, or may become pregnant. LIPITOR has not been shown to prevent heart disease or heart attacks.

If you take LIPITOR, tell your doctor about any unusual muscle pain or weakness. This could be a sign of serious side effects. It is important to tell your doctor about any medications you are currently taking to avoid possible serious drug interactions. Your doctor may do simple blood tests to monitor liver function before and during drug treatment. The most commonly reported side effects are gas, constipation, stomach pain and indigestion. They are usually mild and tend to go away.

Please see additional important information on next page.

The bad news: high cholesterol may have as much to do with family genes as food. The good news: if diet and exercise aren't enough, adding LIPITOR can lower your total cholesterol 29% to 45% and your bad cholesterol 39% to 60% (average effect depending on dose). So shake up your tree a little. One in five people has high cholesterol and millions need treatment — talk to your doctor to find out if LIPITOR is right for you. To learn more, contact us at **1-888-LIPITOR** or **www.lipitor.com.**

LIPITOR®
atorvastatin calcium
tablets

FOR CHOLESSTEROL™

© 2002 Pfizer Inc. All rights reserved. Printed in USA Pfizer U.S. Pharmaceuticals

LIPITOR® (Atorvastatin Calcium) Tablets

Brief Summary of Prescribing Information

CONTRAINDICATIONS: Active liver disease or unexplained persistent elevations of serum transaminases. Hypersensitivity to any component of this medication. **Pregnancy and Lactation** — Atherosclerosis is a chronic process and discontinuation of lipid-lowering drugs during pregnancy should have little impact on the outcome of long-term therapy of primary hypercholesterolemia. Cholesterol and other products of cholesterol biosynthesis are essential components for fetal development (including synthesis of steroids and cell membranes). Since HMG-CoA reductase inhibitors decrease cholesterol synthesis and possibly the synthesis of other biologically active substances derived from cholesterol, they may cause fetal harm when administered to pregnant women. Therefore, HMG-CoA reductase inhibitors are contraindicated during pregnancy and in nursing mothers. ATORVASTATIN SHOULD BE ADMINISTERED TO WOMEN OF CHILDBEARING AGE ONLY WHEN SUCH PATIENTS ARE HIGHLY UNLIKELY TO CONCEIVE AND HAVE BEEN INFORMED OF THE POTENTIAL HAZARDS. If the patient becomes pregnant while taking this drug, therapy should be discontinued and the patient apprised of the potential hazard to the fetus.

WARNINGS: Liver Dysfunction — HMG-CoA reductase inhibitors, like some other lipid-lowering therapies, have been associated with biochemical abnormalities of liver function. **Persistent elevations (>3 times the upper limit of normal [ULN] occurring on 2 or more occasions) in serum transaminases occurred in 0.7% of patients who received atorvastatin in clinical trials. The incidence of these abnormalities was 0.2%, 0.2%, 0.6%, and 2.3% for 10, 20, 40, and 80 mg, respectively.** One patient in clinical trials developed jaundice. Increases in liver function tests (LFT) in other patients were not associated with jaundice or other clinical signs or symptoms. Upon dose reduction, drug interruption, or discontinuation, transaminase levels returned to or near pretreatment levels without sequelae. Eighteen of 30 patients with persistent LFT elevations continued treatment with a reduced dose of atorvastatin. **It is recommended that liver function tests be performed prior to and at 12 weeks following both the initiation of therapy and any elevation of dose, and periodically (eg, semiannually) thereafter.** Liver enzyme changes generally occur in the first 3 months of treatment with atorvastatin. Patients who develop increased transaminase levels should be monitored until the abnormalities resolve. Should an increase in ALT or AST of >3 times ULN persist, reduction of dose or withdrawal of atorvastatin is recommended. Atorvastatin should be used with caution in patients who consume substantial quantities of alcohol and/or have a history of liver disease. Active liver disease or unexplained persistent transaminase elevations are contraindications to the use of atorvastatin (see CONTRAINDICATIONS). **Skeletal Muscle — Rare cases of rhabdomyolysis with acute renal failure secondary to myoglobinuria have been reported with atorvastatin and with other drugs in this class.** Uncomplicated myalgia has been reported in atorvastatin-treated patients (see ADVERSE REACTIONS). Myopathy, defined as muscle aches or muscle weakness in conjunction with increases in creatine phosphokinase (CPK) values >10 times ULN, should be considered in any patient with diffuse myalgias, muscle tenderness or weakness, and/or marked elevation of CPK. Patients should be advised to report promptly unexplained muscle pain, tenderness or weakness, particularly if accompanied by malaise or fever. Atorvastatin therapy should be discontinued if markedly elevated CPK levels occur or myopathy is diagnosed or suspected. The risk of myopathy during treatment with drugs in this class is increased with concurrent administration of cyclosporine, fibric acid derivatives, erythromycin, niacin, or azole antifungals. Physicians considering combined therapy with atorvastatin and fibric acid derivatives, erythromycin, immunosuppressive drugs, azole antifungals, or lipid-lowering doses of niacin should carefully weigh the potential benefits and risks and should carefully monitor patients for any signs or symptoms of muscle pain, tenderness, or weakness, particularly during the initial months of therapy and during any periods of upward dosage titration of either drug. Periodic creatine phosphokinase (CPK) determinations may be considered in such situations, but there is no assurance that such monitoring will prevent the occurrence of severe myopathy. **Atorvastatin therapy should be temporarily withheld or discontinued in any patient with an acute, serious condition suggestive of a myopathy or having a risk factor predisposing to the development of renal failure secondary to rhabdomyolysis (eg, severe acute infection, hypotension, major surgery, trauma, severe metabolic, endocrine and electrolyte disorders, and uncontrolled seizures).**

PRECAUTIONS: General — Before instituting therapy with atorvastatin, an attempt should be made to control hypercholesterolemia with appropriate diet, exercise, and weight reduction in obese patients, and to treat other underlying medical problems (see INDICATIONS AND USAGE in full prescribing information). **Information for Patients** — Patients should be advised to report promptly unexplained muscle pain, tenderness, or weakness, particularly if accompanied by malaise or fever. **Drug Interactions** — The risk of myopathy during treatment with drugs of this class is increased with concurrent administration of cyclosporine, fibric acid derivatives, niacin (nicotinic acid), erythromycin, azole antifungals (see WARNINGS, Skeletal Muscle). ***Antacid:*** When atorvastatin and Maalox® TC suspension were coadministered, plasma concentrations of atorvastatin decreased approximately 35%. However, LDL-C reduction was not altered. ***Antipyrine:*** Because atorvastatin does not affect the pharmacokinetics of antipyrine, interactions with other drugs metabolized via the same cytochrome isozymes are not expected. ***Colestipol:*** Plasma concentrations of atorvastatin decreased approximately 25% when colestipol and atorvastatin were coadministered. However, LDL-C reduction was greater when atorvastatin and colestipol were coadministered than when either drug was given alone. ***Cimetidine:*** Atorvastatin plasma concentrations and LDL-C reduction were not altered by coadministration of cimetidine. ***Digoxin:*** When multiple doses of atorvastatin and digoxin were coadministered, steady-state plasma digoxin concentrations increased by approximately 20%. Patients taking digoxin should be monitored appropriately. ***Erythromycin:*** In healthy individuals, plasma concentrations of atorvastatin increased approximately 40% with coadministration of atorvastatin and erythromycin, a known inhibitor of cytochrome P450 3A4 (see WARNINGS, Skeletal Muscle). ***Oral Contraceptives:*** Coadministration of atorvastatin and an oral contraceptive increased AUC values for norethindrone and ethinyl estradiol by approximately 30% and 20%. These increases should be considered when selecting an oral contraceptive for a woman taking atorvastatin. ***Warfarin:*** Atorvastatin had no clinically significant effect on prothrombin time when administered to patients receiving chronic warfarin treatment. **Endocrine Function** — HMG-CoA reductase inhibitors interfere with cholesterol synthesis and theoretically might blunt adrenal and/or gonadal steroid production. Clinical studies have shown that atorvastatin does not reduce basal plasma cortisol concentration or impair adrenal reserve. The effects of HMG-CoA reductase inhibitors on male fertility have not been studied in adequate numbers of patients. The effects, if any, on the pituitary-gonadal axis in premenopausal women are unknown. Caution should be exercised if an HMG-CoA reductase inhibitor is administered concomitantly with drugs that may decrease the levels or activity of endogenous steroid hormones, such as ketoconazole, spironolactone, and cimetidine. **CNS Toxicity** — Brain hemorrhage was seen in a female dog treated for 3 months at 120 mg/kg/day. Brain hemorrhage and optic nerve vacuolation were seen in another female dog that was sacrificed in moribund condition after 11 weeks of escalating doses up to 280 mg/kg/day. The 120 mg/kg dose resulted in a systemic exposure approximately 16 times the human plasma area-under-the-curve (AUC, 0-24 hours) based on the maximum human dose of 80 mg/day. A single tonic convulsion was seen in each of 2 male dogs (one treated at 10 mg/kg/day and one at 120 mg/kg/day) in a 2-year study. No CNS lesions have been observed in mice after chronic treatment for up to 2 years at doses up to 400 mg/kg/day or in rats at doses up to 100 mg/kg/day. These doses were 6 to 11 times (mouse) and 8 to 16 times (rat) the human AUC (0-24) based on the maximum recommended human dose of 80 mg/day. CNS vascular lesions, characterized by perivascular hemorrhages, edema, and mononuclear cell infiltration of perivascular spaces, have been observed in dogs treated with other members of this class. A chemically similar drug in this class produced optic nerve degeneration (Wallerian degeneration of retinogeniculate fibers) in clinically normal dogs in a dose-dependent fashion at a dose that produced plasma drug levels about 30 times higher than the mean drug level in humans taking the highest recommended dose. **Carcinogenesis, Mutagenesis, Impairment of Fertility** — In a 2-year carcinogenicity study in rats at dose levels of 10, 30, and 100 mg/kg/day, 2 rare tumors were found in muscle in high-dose females: in one, there was a rhabdomyosarcoma and, in another, there was a fibrosarcoma. This dose represents a plasma AUC (0-24) value of approximately 16 times the mean human plasma drug exposure after an 80 mg oral dose. A 2-year carcinogenicity study in mice given 100, 200, or 400 mg/kg/day resulted in a significant increase in liver adenomas in high-dose males and liver carcinomas in high-dose females. These findings occurred at plasma AUC (0-24) values of approximately 6 times the mean human plasma drug exposure after an 80 mg oral dose. *In vitro,* atorvastatin was not mutagenic or clastogenic in the following tests with and without metabolic activation: the Ames test with *Salmonella typhimurium* and *Escherichia coli,* the HGPRT forward mutation assay in Chinese hamster lung cells, and the chromosomal aberration assay in Chinese hamster lung cells. Atorvastatin was negative in the *in vivo* mouse micronucleus test. Studies in rats performed at doses up to 175 mg/kg (15 times the human exposure) produced no changes in fertility. There was aplasia and aspermia in the epididymis of 2 of 10 rats treated with 100 mg/kg/day of atorvastatin for 3 months (16 times the human AUC at the 80 mg dose); testis weights were significantly lower at 30 and 100 mg/kg and epididymal weight was lower at 100 mg/kg. Male rats given 100 mg/kg/day for 11 weeks prior to mating had decreased sperm motility, spermatid head concentration, and increased abnormal sperm. Atorvastatin caused no adverse effects on semen parameters, or reproductive organ-histopathology in dogs given doses of 10, 40, or 120 mg/kg for two years. **Pregnancy — Pregnancy Category X:** **See CONTRAINDICATIONS.** Safety in pregnant women has not been established. Atorvastatin crosses the rat placenta and reaches a level in fetal liver equivalent to that of maternal plasma. Atorvastatin was not teratogenic in rats at doses up to 300 mg/kg/day or in rabbits at doses up to 100 mg/kg/day. These doses resulted in multiples of about 30 times (rat) or 20 times (rabbit) the human exposure based on surface area (mg/m^2). In a study in rats given 20, 100, or 225 mg/kg/day, from gestation day 7 through to lactation day 21 (weaning), there was decreased pup survival at birth, neonate, weaning, and maturity in pups of mothers dosed with 225 mg/kg/day. Body weight was decreased on days 4 and 21 in pups of mothers dosed at 100 mg/kg/day; pup body weight was decreased at birth and at days 4, 21, and 91 at 225 mg/kg/day. Pup development was delayed (rotorod performance at 100 mg/kg/day and acoustic startle at 225 mg/kg/day; pinnae detachment and eye opening at 225 mg/kg/day). These doses correspond to 6 times (100 mg/kg) and 22 times (225 mg/kg) the human AUC at 80 mg/day. Rare reports of congenital anomalies have been received following intrauterine exposure to HMG-CoA reductase inhibitors. There has been one report of severe congenital bony deformity, tracheo-esophageal fistula, and anal atresia (VATER association) in a baby born to a woman who took lovastatin with dextroamphetamine sulfate during the first trimester of pregnancy. LIPITOR should be administered to women of child-bearing potential only when such patients are highly unlikely to conceive and have been informed of the potential hazards. If the woman becomes pregnant while taking LIPITOR, it should be discontinued and the patient advised again as to the potential hazards to the fetus. **Nursing Mothers** — Nursing rat pups had plasma and liver drug levels of 50% and 40%, respectively, of that in their mother's milk. Because of the potential for adverse reactions in nursing infants, women taking LIPITOR should not breastfeed (see CONTRAINDICATIONS). **Pediatric Use** — Treatment experience in a pediatric population is limited to doses of LIPITOR up to 80 mg/day for 1 year in 8 patients with homozygous FH. No clinical or biochemical abnormalities were reported in these patients. None of these patients was below 9 years of age. **Geriatric Use** —The safety and efficacy of atorvastatin (10-80 mg) in the geriatric population (≥65 years of age) was evaluated in the ACCESS study. In this 54-week open-label trial 1,958 patients initiated therapy with atorvastatin 10 mg. Of these, 835 were elderly (≥65 years) and 1,123 were non-elderly. The mean change in LDL-C from baseline after 6 weeks of treatment with atorvastatin 10 mg was -38.2% in the elderly patients versus -34.6% in the non-elderly group. The rates of discontinuation due to adverse events were similar between the two age groups. There were no differences in clinically relevant laboratory abnormalities between the age groups.

ADVERSE REACTIONS: LIPITOR is generally well tolerated. Adverse reactions have usually been mild and transient. In controlled clinical studies of 2502 patients, <2% of patients were discontinued due to adverse experiences attributable to atorvastatin. The most frequent adverse events thought to be related to atorvastatin were constipation, flatulence, dyspepsia, and abdominal pain. **Clinical Adverse Experiences** — Adverse experiences reported in ≥2% of patients in placebo-controlled clinical studies of atorvastatin, regardless of causality assessment, are shown in the following table.

Adverse Events in Placebo-Controlled Studies (% of Patients)

BODY SYSTEM Adverse Event	Placebo N = 270	Atorvastatin 10 mg N = 863	Atorvastatin 20 mg N = 36	Atorvastatin 40 mg N = 79	Atorvastatin 80 mg N = 94
BODY AS A WHOLE					
Infection	10.0	10.3	2.8	10.1	7.4
Headache	7.0	5.4	16.7	2.5	6.4
Accidental Injury	3.7	4.2	0.0	1.3	3.2
Flu Syndrome	1.9	2.2	0.0	2.5	3.2
Abdominal Pain	0.7	2.8	0.0	3.8	2.1
Back Pain	3.0	2.8	0.0	3.8	1.1
Allergic Reaction	2.6	0.9	2.8	1.3	0.0
Asthenia	1.9	2.2	0.0	3.8	0.0
DIGESTIVE SYSTEM					
Constipation	1.8	2.1	0.0	2.5	1.1
Diarrhea	1.5	2.7	0.0	3.8	5.3
Dyspepsia	4.1	2.3	2.8	1.3	2.1
Flatulence	3.3	2.1	2.8	1.3	1.1
RESPIRATORY SYSTEM					
Sinusitis	2.6	2.8	0.0	2.5	6.4
Pharyngitis	1.5	2.5	0.0	1.3	2.1
SKIN AND APPENDAGES					
Rash	0.7	3.9	2.8	3.8	1.1
MUSCULOSKELETAL SYSTEM					
Arthralgia	1.5	2.0	0.0	5.1	0.0
Myalgia	1.1	3.2	5.6	1.3	0.0

The following adverse events were reported, regardless of causality assessment in patients treated with atorvastatin in clinical trials. The events in italics occurred in ≥2% of patients and the events in plain type occurred in <2% of patients.

Body as a Whole: *Chest pain,* face edema, fever, neck rigidity, malaise, photosensitivity reaction, generalized edema. ***Digestive System:*** *Nausea,* gastroenteritis, liver function tests abnormal, colitis, vomiting, gastritis, dry mouth, rectal hemorrhage, esophagitis, eructation, glossitis, mouth ulceration, anorexia, increased appetite, stomatitis, biliary pain, cheilitis, duodenal ulcer, dysphagia, enteritis, melena, gum hemorrhage, stomach ulcer, tenesmus, ulcerative stomatitis, hepatitis, pancreatitis, cholestatic jaundice. ***Respiratory System:*** *Bronchitis, rhinitis,* pneumonia, dyspnea, asthma, epistaxis. ***Nervous System:*** *Insomnia, dizziness,* paresthesia, somnolence, amnesia, abnormal dreams, libido decreased, emotional lability, incoordination, peripheral neuropathy, torticollis, facial paralysis, hyperkinesia, depression, hypesthesia, hypertonia. ***Musculoskeletal System:*** *Arthritis,* leg cramps, bursitis, tenosynovitis, myasthenia, tendinous contracture, myositis. ***Skin and Appendages:*** Pruritus, contact dermatitis, alopecia, dry skin, sweating, acne, urticaria, eczema, seborrhea, skin ulcer. ***Urogenital System:*** *Urinary tract infection,* urinary frequency, cystitis, hematuria, impotence, dysuria, kidney calculus, nocturia, epididymitis, fibrocystic breast, vaginal hemorrhage, albuminuria, breast enlargement, metrorrhagia, nephritis, urinary incontinence, urinary retention, urinary urgency, abnormal ejaculation, uterine hemorrhage. ***Special Senses:*** Amblyopia, tinnitus, dry eyes, refraction disorder, eye hemorrhage, deafness, glaucoma, parosmia, taste loss, taste perversion. ***Cardiovascular System:*** Palpitation, vasodilatation, syncope, migraine, postural hypotension, phlebitis, arrhythmia, angina pectoris, hypertension. ***Metabolic and Nutritional Disorders:*** *Peripheral edema,* hyperglycemia, creatine phosphokinase increased, gout, weight gain, hypoglycemia. ***Hemic and Lymphatic System:*** Ecchymosis, anemia, lymphadenopathy, thrombocytopenia, petechia. ***Postintroduction Reports*** — Adverse events associated with LIPITOR therapy reported since market introduction, that are not listed above, regardless of causality assessment, include the following: anaphylaxis, angioneurotic edema, bullous rashes (including erythema multiforme, Stevens-Johnson syndrome, and toxic epidermal necrolysis), and rhabdomyolysis.

OVERDOSAGE: There is no specific treatment for atorvastatin overdosage. In the event of an overdose, the patient should be treated symptomatically, and supportive measures instituted as required. Due to extensive drug binding to plasma proteins, hemodialysis is not expected to significantly enhance atorvastatin clearance.

Please see full prescribing information for more information about LIPITOR.

℞ only
Pharmaceuticals

Manufactured by:
Pfizer Ireland Pharmaceuticals
Dublin, Ireland

©1998-'02 Pfizer Ireland

Distributed by:

Parke-Davis
Division of Pfizer Inc, NY, NY 10017

MADE IN PUERTO RICO

Rev. 1, April 2002-A

© 2002 Pfizer Inc. All rights reserved.

THE WOODSMEN COULD NOT HAVE KNOWN THAT THEIR MAKESHIFT HEATERS WERE PACKED WITH STRONTIUM 90.

Army, which used it as a training camp for border guards. Then, beginning in April 1997, several recruits began to suffer intermittent nausea, vomiting and weakness. Lesions the size of silver dollars appeared on their skin. Not until a 20-year-old soldier lost 30 pounds over several months, while at the same time his fingers began shriveling, did physicians diagnose radiation syndrome.

Searching Lilo for the radioactive culprits, scientists working with the Georgian Army turned up scores of them. Among them were a dozen teakettle-size containers of cesium 137, an emitter of gamma radiation, and a capsule of concentrated cesium 137 not much bigger than a Tic Tac, found in a soldier's jacket pocket. Meskhi says the Soviets had used those items to calibrate radiation monitors, but others say they aren't sure about that. In any event, all 11 young border guards exposed to the radiation had to undergo painful operations in which large patches of dead skin and flesh were cut away. But they all survived. "This is when we first realized we had a serious problem with orphan [radiation] sources," says Zurab Tavartkiladze, first deputy minister of Georgia's Environment Ministry.

Yet another eye-opening radiation accident occurred in Georgia a few years later. On a frigid December afternoon in 2001, three men gathering wood near the Inguri River in northern Georgia encountered a pair of canisters the size of paint pails. The objects, oddly hot to the touch, had melted surrounding snow. The men settled down for the night by the canisters, as though by a fire. They could not have known that their makeshift heaters were packed with strontium 90, an emitter of beta and gamma radiation.

Within hours they felt nauseated, grew dizzy and started vomiting. Soon their skin started to peel—radiation burn. A stream of beta particles, or electrons, from the strontium had destroyed their skin, while x rays and gamma rays had blasted the underlying tissue. Their wounds festered. Back in Tbilisi, physicians faxed an urgent plea to the IAEA headquarters in Vienna for help securing the devices. "My shock was so great when I learned how radioactive these sources are," says Abel Julio González, director of radiation and waste safety at the IAEA. The canisters found in Georgia were highly radioactive, on the order of 40,000 curies apiece—about 40 times the output of a radiation therapy machine.

González and colleagues, who immediately realized that the canisters held the makings of a potent dirty bomb, were alarmed by what they later learned about the Soviet-era devices, which powered electrical generators in remote locales and have been largely unknown to Western nuclear authorities until recently. In the generators, high-energy beta particles shed by the strontium 90 slammed into the walls of a titanium-based ceramic receptacle; some energy was shed as x rays and some as heat, warming the ceramic to around 900 degrees Fahrenheit. A transformer converted the heat to electricity. The IAEA says it has captured all six of the strontium 90 generators that it believes were in Georgia, which the Soviets used to power radio transmissions.

But the canisters are turning up all around the old USSR. After being prodded by the IAEA, Russia's Ministry of Atomic Energy gradually divulged that in Soviet times a factory in Estonia churned out at least 900 of the generators, including some models that are five times more radioactive than the units recovered in Georgia. No more than a couple dozen of the generators have been accounted for, says González, adding that the IAEA's efforts to track down the missing generators are hampered by a legacy of lost records and even theft. Because the generators once also provided electricity for lighthouses along the Arctic coast, from the Baltic to the Bering Strait, Russia is working with the Norwegian Radiation Protection Authority to salvage radiothermal generators in the Murmansk region and ship them to a Russian nuclear site for storage.

INSPIRED by the rad rangers' successes in Georgia, government and IAEA officials are stepping up the search for renegade radiation sources in other former Soviet nations. The United States, Russia and the IAEA teamed up in Moldova last December to capture such materials, and the IAEA sent technicians for the first time into Tajikistan in central Asia. "I used to say that we were seeing the tip of the iceberg," says González. But in the past year, he says, "more and more of that iceberg has come into the open."

Still, the most insidious orphaned radioactive source came to light only early last year when the IAEA learned of an experimental agricultural project called Gamma Kolos. (*Kolos*, a Russian word, refers to grain.) In the Soviet-era program, which started in the 1970s but was abandoned, tractors fitted with containers of cesium 137 (and lead shielding to protect the driver) irradiated wheat seeds before sowing them, in an attempt to induce beneficial mutations in the crops. The radiation was also applied to grain after harvest,

Love to travel? Love to learn?

Take the Smithsonian on Your Next Trip

Our New Name!
Smithsonian Journeys

U.S. AND CANADA TOURS

ROYAL SHAKESPEARE COMPANY
APRIL 30–MAY 4, 2003
See the Royal Shakespeare Company's stellar production of *As You Like It* at the John F. Kennedy Center in Washington, DC. Enjoy additional performances at the Washington Shakespeare Theatre and the Folger Theatre. $1,495*

BOSTON ARTS AND CRAFTS
MAY 1–4, 2003
Meet artists at their studios, visit the North Bennet Street School and enjoy a private reception in a collector's home. $1,445

QUEBEC CITY WEEKEND
MAY 15–18, 2003
Discover the delightful European allure of Quebec City during a weekend of sumptuous meals, excursions, and a private concert. Stay at the famous Chateau Frontenac. $1,095*

*REGISTER BY MARCH 15 AND SAVE $100

PASSAGE THROUGH THE GREAT LAKES
JUNE 13-21, 2003
Explore our third coast including all five Great Lakes aboard the luxury yacht *Le Levant*. Cruise from Toronto to Milwaukee with stops at Niagara Falls, Mackinac Island and other historic sites. From $4,600

GREAT RAILROADS OF THE APPALACHIANS
JUNE 13-22, 2003
Ride the rails on scenic day trains through deep gorges and high summits of the Blue Ridge Mountains from Asheville, North Carolina to Cumberland, Maryland. $2,895

INTERNATIONAL JOURNEYS

MONGOLIA: THE LAND OF THE NOMAD
JULY 2–15, 2003
Discover one of the last remaining nomadic cultures in the world during its festival time. $4,081

VIKING PASSAGE: SCOTTISH ISLES, FAROES, ICELAND, GREENLAND, NEWFOUNDLAND, CAPE BRETON & NOVA SCOTIA.
AUGUST 10–27, 2003
Aboard the luxurious, sturdy Seven Seas *Navigator*, spend long summer days on a history and archeology rich voyage across the North Atlantic. From $9,995

HIDDEN TREASURES OF THE PO RIVER
SEPTEMBER 6–17, 2003
From the luxurious *River Cloud II*, visit the art-filled cities of Venice, Padua, Ravenna, Verona, Mantua, Cremona and more. From $6,165

VALUE-PRICED TOURS

SMITHSONIAN JOURNEYS—TRAVEL ADVENTURES WITH COLLETTE VACATIONS
Introducing 20 new value-priced learning vacations featuring a combination of enriching lectures, fascinating excursions with time on your own for independent discovery. Prices starting at $2139 for 13 days in China and the Yangtze River; $1899 for 14 days in France; $1799 for 10 days in Newfoundland and Labrador; $1149 for 6 days in Philadelphia and Washington, D.C.; and $1699 for 9 days in the Canadian Rockies. Additional destinations include: Ireland, Britain, Spain, Iceland, Costa Rica, Egypt, Australia and New Zealand, the Baltic, Newfoundland and Labrador, Canadian and U.S. National Parks, and Southwest America, and Eastern U.S. Call 1-800-528-8167. (code: smithoy)

INDEPENDENT TRAVEL

SMITHSONIAN MUSEUM LOVER'S VACATIONS
Explore London, Paris, Amsterdam, Montreal, New York, and Washington, D.C., on unescorted learning vacations—any time of the year! Enjoy museum passes, cultural excursions, fine accommodations and dining, and exclusive *Museum Notes* or a Smithsonian publication—all at a great value! Call 1-800-528-8167 for information. From $289.

ALL PRICES ARE PER PERSON, BASED ON DOUBLE OCCUPANCY.

SmithsonianJourneys.org

For information on any of our **350 worldwide tours** call **1-877-EDU-TOUR** (1-877-338-8687)
or visit www.SmithsonianJourneys.org

A 6-YEAR-OLD GIRL PLAYED WITH THE RADIOACTIVE MATERIAL, COATING HER HANDS WITH THE CESIUM DUST WHILE EATING.

to prevent it from germinating. A total of ten of the containers have been recovered in Georgia, Moldova and Ukraine; no one knows how many more are unaccounted for.

To security experts, the scary thing about cesium 137, commonly produced as a powdery cesium chloride compound, is that a terrorist could fill his pockets with it and sprinkle it in a subway car, an office building or a playground and escape notice. "You don't need a bomb to spread it around," says González. The terrorist might die from radiation exposure, but that prospect is not necessarily a deterrent. Scores of people could be contaminated, with many becoming seriously ill or dying.

A little-reported accident in Brazil serves as a warning. In September 1987, a young scrap metal scavenger in Goiânia, the capital of Goiás State in the central Brazilian plateau, took a radiation therapy machine from a deserted clinic and sold it to a junk dealer, who wanted the stainless steel. Then the junk dealer noticed a blue glow from a capsule. Someone dug out the powdery material—it was roughly three ounces of cesium 137—with a screwdriver. Others daubed it on their skin as though it were carnival glitter. A 6-year-old girl played with the material, which coated her hands with cesium dust, as she ate.

By the time Goiás authorities brought the situation under control several weeks later, 249 people were found to be contaminated, and the 10 most serious patients were transported to Rio de Janeiro for treatment. The 6-year-old girl was severely ill for a month—dead patches of skin on her hands, hair falling out, capillaries rupturing, infections raging in her lungs and kidneys—before she died.

The accident is not a precise model of what would happen after a dirty bomb exploded, partly because, Bunn says, the victims received very high radiation doses after spreading the cesium on themselves. But, he adds, the high cost of decontaminating the area and the large numbers of worried but unexposed people who showed up at hospitals seeking treatment are possible consequences of a dirty bomb attack.

The incident, classified as one of the worst radiation accidents in history, prompted the IAEA to develop new guidelines for the handling and disposing of radiation sources. The agency is revising those guidelines nowadays in the light of terrorists' threats and their willingness to sacrifice their own lives in carrying them out. It hopes to aid civil defense planners by describing the terrorist potential of different radiation sources; for instance, even though cesium 137 is no more potent than, say, cobalt 60, it'll be classified as a more significant terrorist threat because it's easier to disperse. The IAEA acknowledges that some people may consider the new guidelines too explicit, constituting, as some officials half-jokingly put it, "an Osama bin Laden manual." But an IAEA official says that it is vital to make such information available so security and health planners can counter the dirty bomb threat. In contrast, the official adds, Al Qaeda "doesn't need information. It needs *opportunity*."

NEAR THE END of my Georgia trip, Tavartkiladze, of the Environment Ministry, agrees to take me to a facility in which the six recovered strontium canisters and four Gamma Kolos containers—among the most dangerous radioactive orphans on earth—are being stored, on the condition I not reveal the facility's name or location.

Our van pulls onto a dirt road that wends through farmland dotted with livestock and ramshackle barns. Finally, we stop at a padlocked iron gate and Meskhi jumps out to chat with a guard, a gangly young man who does not appear to be armed. He unlocks the gate, and we pass through. A few minutes later, our van parks near a barn-size concrete shed with a steel door. Inside are two, 10-foot-deep concrete chambers; one is covered by a thick concrete lid. The other is open.

We walk on a wooden plank and step onto the concrete lid. In the chamber below are the strontium canisters. "Radiation levels here are at background levels," Meskhi says, clearly hoping to be reassuring.

In the open chamber are what look like miniature lunar landers. The metal objects, three gray and one white, are about a yard and a half tall and two feet wide; each squats on spindly legs attached to the body by a metal girdle. They are the Gamma Kolos containers, laden with cesium 137. A heavy concrete lid will eventually cover this chamber, too, says Meskhi. I'm pretty sure I'm not in any danger—all that cesium is shielded by the containers' lead lining—but it's spine-chilling all the same.

As our van rumbles away from this secret site, I feel reasonably assured that the Georgian-IAEA team has rooted out the radiological fugitives in Georgia. But I wonder about other places in the old Soviet empire and about whether the authorities, or terrorists, are rounding up lost or forgotten radiation sources. ○

WHERE THE WILD

One hundred years ago this month, President Theodore Roosevelt started what would become the world's most successful experiment in conservation

PHOTOGRAPHS BY JOHN AND KAREN HOLLINGSWORTH

Wood storks at Georgia's Harris Neck National Wildlife Refuge perch (at left) on an artificial nesting platform and (at right) on a snag.

THINGS ARE

WHEN HE HEARD that Palm Beach yachtsmen were shooting brown pelicans for sport as the ponderous birds flew to their nests on a small island not far from Melbourne, Florida, President Theodore Roosevelt reportedly asked an aide, "Is there any law that will prevent me from declaring Pelican Island a federal bird reservation?"

"No," the aide replied. "The island is federal property."

"Very well, then, I so declare it."

The exchange may be apocryphal, but Roosevelt did sign an executive order, 100 years ago this month, creating Pelican Island Reservation, the first federal bird preserve and the first piece of the vast patchwork of sanctuaries known as the National Wildlife Refuge System.

The refuge system marks its centennial this month with special events at Pelican Island and other refuges and, in November, with an exhibition at the Smithsonian's National Museum of Natural History. Totaling nearly 95 million acres, or roughly the size of Montana, the system consists of 540 refuges spread across all 50 states and 12 U.S. territories and possessions. National parks cover 13 percent less acreage but seem to get all the glory because "parks are for people," says Daniel Ashe, the refuge system's chief. "Refuges are for wildlife." They protect the last existing habitats for some of the most endangered animals and plants, including the light-footed clapper rail, desert pupfish, leatherback sea turtle, American crocodile and green pitcher-plant. The refuge system is "one of this country's greatest conservation success stories," says Eric Jay Dolin, author of *The Smithsonian Book of National Wildlife Refuges*, published by Smithsonian Institution Press. (The photographs here are from the book.)

By the late 19th century, conservationists had already begun focusing public attention on the consequences of industrial-scale hunting. By then, the nearly countless bison that once thundered across the plains were a memory. Passenger pigeons, once so plentiful that naturalist John James Audubon reported seeing a flock of more than a billion in Kentucky in 1813, no longer filled the sky, driven to extinction by hunters wielding huge nets to meet the demand for pigeon meat.

"The nation behaves well if it treats resources as assets which it must turn over to the next generation increased, and not impaired, in value," wrote President Theodore Roosevelt in 1910. Conservationist John Muir (with TR, below, on Yosemite's Glacier Point in 1903) is credited with urging creation of Yosemite and Sequoia national parks and helping raise the president's environmental awareness.

LIBRARY OF CONGRESS

Roosevelt, a hunter himself, was appalled by the wholesale slaughter of mammals (above, bison skulls) and birds, which were killed by the millions for their feathers (below left). Paul Kroegel (below, right, in Florida) was the refuge system's first warden.

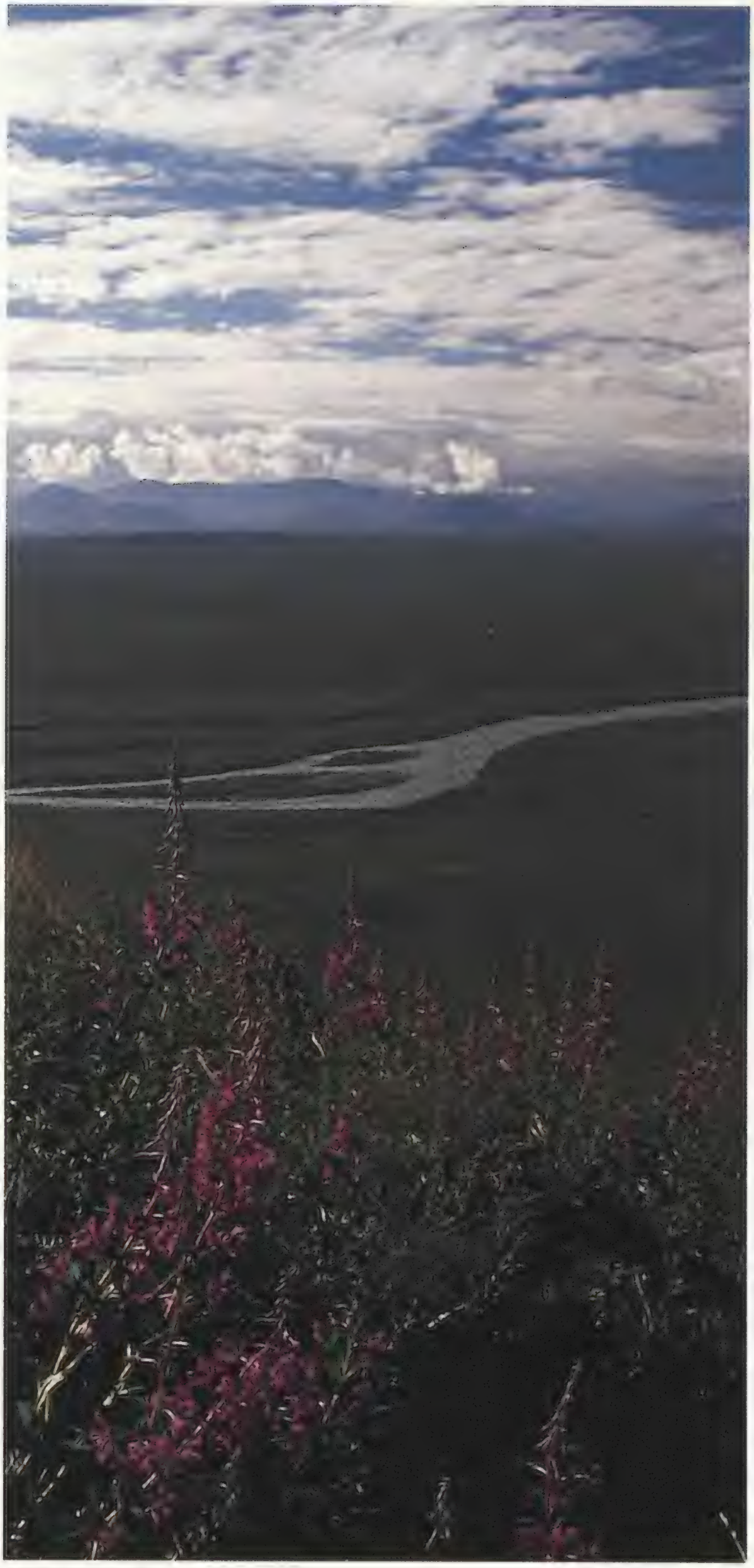
BURTON HISTORICAL COLLECTION, DETROIT PUBLIC LIBRARY; HARRY M. RHOADS / DENVER PUBLIC LIBRARY, WESTERN HISTORY COLLECTION; U.S. FISH AND WILDLIFE SERVICE

But nothing galvanized opposition to wholesale slaughter more than the plume trade. Fashionable turn-of-the-century women promenaded in hats resplendent with feathers or even entire stuffed birds. In 1901, the American Ornithologists Union persuaded Florida lawmakers to protect nongame birds, but the state didn't have the manpower to enforce the laws, and the shooting continued. That's when Roosevelt, alerted to the killing by conservationists, created the Pelican Island refuge, where U.S. warden Paul Kroegel, newly hired for $1 a month, protected the birds from poachers.

It wasn't the first time the federal government sought to spare wildlife by setting aside land. In 1869, two years after the United States bought the Alaskan territory from Russia, Congress created a sanctuary in the Pribilof Islands to preserve fur seal rookeries. And in 1894, lawmakers made it a crime to harm wildlife within Yellowstone National Park, which had been established 22 years earlier. But historians credit Roosevelt—a Republican who was, famously, an avid big game hunter—with making the first concerted federal effort to protect wildlife. In his two terms as president (1901 to 1909), he created 51 bird refuges in 17 states and three territories as well as five national parks and 150 national forests.

Some critics charged that his actions were undemocratic for bypassing Congress. "If this practice is to continue, there is no telling how many bird preserves we may have or how much of the territory of the Union these federal bird preserves may ultimately cover," Wyoming congressman Franklin W. Mondell harrumphed in 1909. Since then, debate has largely centered on the question of how much human enterprise the refuges can withstand and still protect wildlife. Today, hunting is allowed on more than half of national refuges—an important tool in managing wildlife. After careful review, regulators also permit public and private parties to

The Alaska National Interest Lands Conservation Act of 1980 nearly tripled the U.S. refuge system by adding nine wildlife refuges and expanding six others to protect both wildlife (above, a brown bear) and flora (far right, fireweed). The Florida Panther refuge (a male panther, right) protects habitat critical to the species, which numbers only 30 to 50 individuals in the wild.



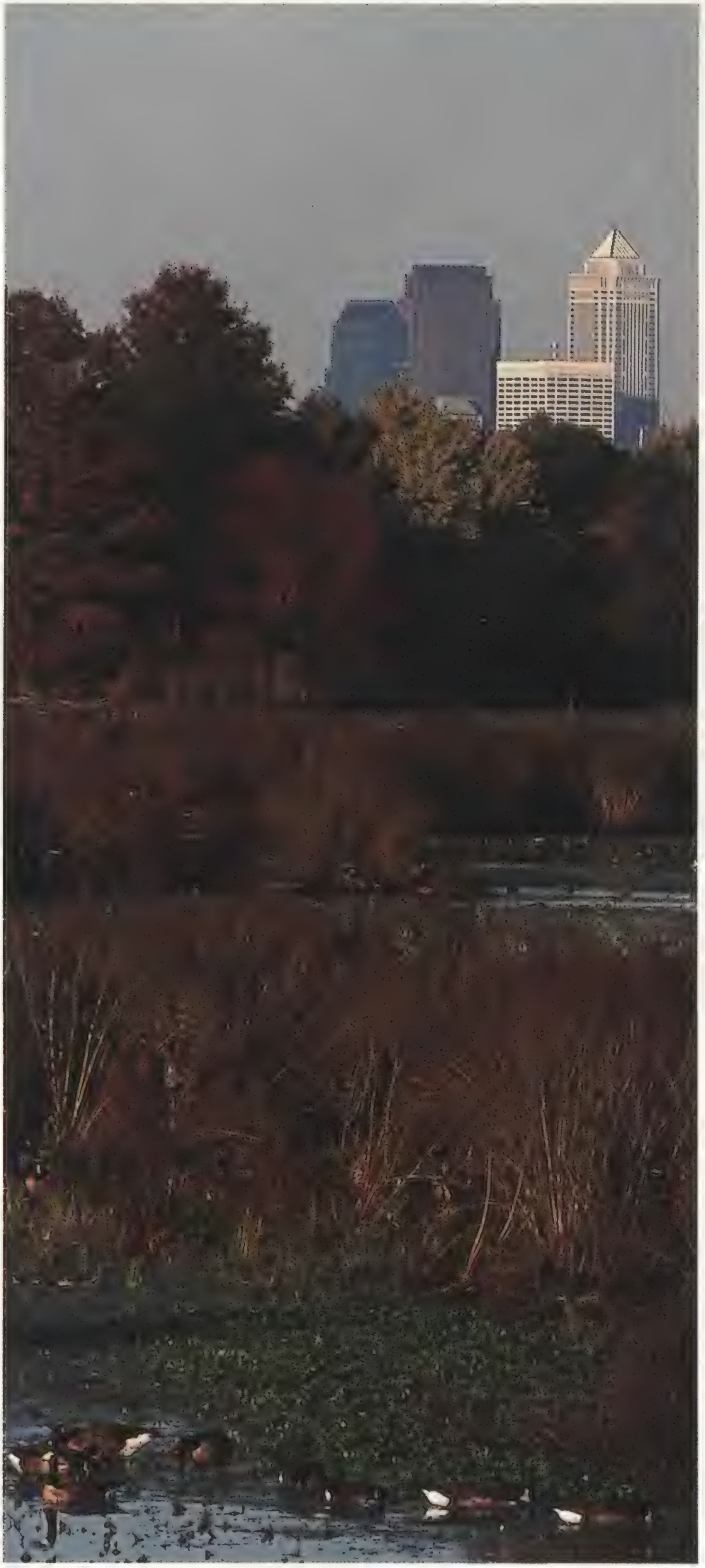
More than 700 species of birds (like these migrating western sandpipers and dunlins at Gray's Harbor refuge in Washington State) are protected by the refuge system.

conduct business on a particular refuge, including livestock grazing, logging, military exercises, farming, oil drilling or gas drilling.

A proposal to allow oil drilling in Alaska's Arctic National Wildlife Refuge (ANWR)—the largest single refuge, at 19.3 million acres—was the subject of heated debate until the Democrat-controlled Senate killed it in 2002. Now that Republicans are in the majority in both the House and Senate, the Arctic drilling plan is likely to be revived. The U.S. Geological Survey has estimated that ANWR's 1.5 million-acre coastal plain contains between 4.3 and 11.9 billion barrels of recoverable oil. (Americans use roughly seven billion barrels annually.) Proponents include Alaska's governor Frank Murkowski, a Republican, who has argued that "safe development of ANWR represents a great step forward in our national and economic security." Environmentalists oppose the plan, saying those pristine acres would be put at risk to obtain relatively small amounts of oil that Americans could readily save by conserving energy. Among the opponents is Theodore Roosevelt IV, great-grandson of the president. "If we did [allow drilling]," he recently told CBS News, "future generations will look back on us and say, 'What was wrong with those people?'"

Whatever the outcome of the next ANWR debate, few would quarrel with the original Theodore Roosevelt's belief that refuges are of "capital importance" in protecting wildlife. "To lose the chance to see frigate-birds soaring in circles above the storm," he wrote in his 1916 memoir, *Book-Lover's Holidays in the Open*, "or a file of pelicans winging their way homeward across the crimson afterglow of the sunset, or a myriad of terns flashing in the bright light of midday as they hover in a shifting maze above the beach—why, the loss is like the loss of a gallery of the masterpieces of the artists of old time." —*JOHN F. ROSS*

Recreational activities, such as hunting and fishing (above, at Alabama's Choctaw refuge), and even commercial endeavors (oil drilling, right, at Louisiana's Lacassine refuge) may take place on protected land if they don't threaten or otherwise bother wildlife. Refuge locations range from the extremely remote to the exurban. (Far right, the Philadelphia skyline can be seen from the John Heinz refuge.)



DANIEL LIBESKIND:
ARCHITECT AT GROUND ZERO

From his Jewish Museum in Berlin to his proposal for the World Trade Center site, Daniel Libeskind designs buildings that reach out to history and humanity

BY STANLEY MEISLER

DANIEL LIBESKIND, the high-spirited American architect who in early February was selected as a finalist in the much-publicized competition to design the site of the World Trade Center, was barely known outside the academic world until 1989. That year he was chosen to build what is now his most acclaimed work—the Jewish Museum in Berlin. He was 42 years old and had taught architecture for 16 years, but Libeskind had never actually built a building. He was not even sure that he would get to build this one. The Berlin Senate, which was to fund the project, was so uncertain about its plans that a nervous and pessimistic Libeskind described all talk about the project as "only a rumor."

After many delays, the building was finally completed in 1999, but it still did not open as a museum. There were arguments about its purpose. Should it serve as a Holocaust memorial, as a gallery of Jewish art or as a catalog of history? While the politicians argued, half a million visitors toured the empty building, and word spread about the wondrous creation of Daniel Libeskind.

By the time the Jewish Museum opened in September 2001, the 5-foot-4 Libeskind was regarded as one of architecture's giants. When critics rank the most exciting architectural innovations of the past decade, they put Libeskind's museum alongside Frank Gehry's Guggenheim Museum in Bilbao, Spain. No survey of contemporary architecture is now complete without a discourse on Libeskind and his astonishing ability to translate meaning into structure. "Libeskind's greatest gift," Paul Goldberger, the *New Yorker* architecture critic, wrote recently, "is for interweaving simple, commemorative concepts and abstract architectural ideas—there is no one alive who does this better."

For all the accolades, Libeskind, now 56, does not have a lengthy list of buildings to show. He has completed only two besides Berlin's Jewish Museum: the Felix Nussbaum Museum

"To acknowledge the terrible deaths while looking to the future with hope seemed like two moments which could not be joined," says Daniel Libeskind (with part of his design for the World Trade Center site). But join them he did. A model (inset, far left) shows his soaring complex embracing the 70-foot-deep hollow of Ground Zero. The complex would include a "Wedge of Light" (inset, left), an open space where the sun will shine without shadow at the times of the attacks.

HIS GOOD HUMOR AND MISCHIEVOUS SMILE ARE SO INFECTIOUS THAT YOU CANNOT HELP LIKING HIM AND WANTING TO BE LIKED BY HIM.

in Osnabrück, Germany, which was finished in 1998, before the Jewish Museum, and the Imperial War Museum of the North in Manchester, England, which opened last July. But projects keep mounting in his office in Berlin, and he now has a dozen works in progress, including his first buildings in North America: an imposing addition to the Denver Art Museum, a Jewish Museum in San Francisco that will be built within an abandoned power station, and an expansion made of interlocking prisms for the Royal Ontario Museum in Toronto. All are slated for completion within the next five years.

Like California-based Gehry, Libeskind is usually described in architectural books as a "deconstructivist"—an architect who takes the basic rectangle of a building, breaks it up on the drawing board and then reassembles the pieces in a much different way. But Libeskind says he never much liked the label. "My work is about preconstruction as well as construction," he says. "It's about everything before the building, all the history of the site." In a sort of architectural alchemy, Libeskind collects ideas about the social and historical context of a project, mixes in his own thoughts, and transforms it all into a physical structure. Architecture, he told me last year, "is a cultural discipline. It's not just technical issues. It's a humanistic discipline grounded in history and in tradition, and these histories and traditions have to be vital parts of design."

As a result, his buildings always seem to tell a story. He designed unusually narrow galleries for the Felix Nussbaum Museum, for example, so that visitors would see the paintings in the same way that Nussbaum himself, a German-Jewish artist murdered during World War II, saw them as he painted in the cramped basement in which he hid from the Nazis. The shape of Libeskind's Jewish Museum in San Francisco, expected to be completed in 2005, is based on the two letters of the Hebrew word *chai*—life. For the Twin Towers project, he proposes placing a memorial at the point where rescue workers converged on the disaster. In Berlin's Jewish Museum, every detail tells of the deep connection between Jewish and German cultures: the windows that slash across the facade, for example, follow imaginary lines drawn between the homes of Jews and non-Jews who lived around the site. Speaking about the museum to *Metropolis* magazine in 1999, Gehry said, "Libeskind expressed an emotion with a building, and that is the most difficult thing to do."

Libeskind's work is so dramatic, in fact, that his good friend Jeffrey Kipnis, a professor of architecture at Ohio State University, worries that other architects may try to emulate Libeskind. "I am not sure I want all buildings to be so heavy with drama, so operatic," Kipnis says. "There's only one Daniel in the world of architecture. I'm glad there's Daniel, and I'm glad there's no other."

Not surprisingly, given the complex ideas embodied in his buildings, Libeskind reads deeply in a host of subjects. In essays, lectures and architectural proposals, he cites and quotes the Austrian avant-garde composer Arnold Schoenberg, the Greek philosopher Heraclitus, the Irish novelist James Joyce and many more. For the World Trade Center project, he read Herman Melville and Walt Whitman and studied the Declaration of Independence. These references, and the familiarity with them that he appears to expect of his readers, make some of Libeskind's writings tough going.

Libeskind dedicated his latest book to his wife, Nina (below): "Her spirit, integrity and magic turn every obstacle into fun."

But all fears of intimidation dissipate on meeting the man, who is as open and friendly as a schoolboy. As we chatted in the back of a hired car in New York City recently, his black shirt and sweater and short, gray-flecked hair reminded the driver of a certain actor. "He looks like John Travolta," the chauffeur said to Libeskind's wife, Nina, in the front seat. "That may turn out to be one of the nicest things you have ever said," she answered. Libeskind smiled shyly and thanked the driver.

His Berlin studio is as unpretentious as he is. Housing 40 or so architects and students, it's a warren of crowded and busy workshops plastered with sketches and filled with building models on the second floor of a 19th-century, former factory building in the western section of the city. "Ever since I began working," says Libeskind, "I have had an abhorrence of conventional, pristine architectural offices."

An interview with Libeskind is more like a conversation, and his good humor and mischievous smile are so infectious that you cannot help liking him and wanting to be liked by

STANLEY MEISLER has written for these pages about U.N. Secretary Kofi Annan and architects Antoni Gaudí and Richard Meier.

NICOLAS ASFOURI / AFP PHOTO; PP. 76,77 GREG MILLER; P. 76 LOWER MANHATTAN DEVELOPMENT CORP. / CORBIS SYGMA (2)

The Jewish Museum (above) zigzags through Berlin, its "Holocaust Tower" and planted "Garden of Exile" honoring the ordeals of German Jews. Libeskind's diagonals and cramped interiors (right) create an unsettling, trapped feeling.

him. His words come in torrents, his eager look matched by a youthful enthusiasm. Talking about his multilingual children, 25-year-old Lev Jacob, 22-year-old Noam and 13-year-old Rachel, Libeskind said, in his usual tumble of words, "They speak with us all the time in English. When the brothers speak to each other about life and girls, they speak Italian. And when they want to scold their sister—German." He asked about my work and my background, and when he discovered that my father, like his, was born in eastern Poland, he got excited. "Is that true?" he asked. "Amazing!"

DANIEL LIBESKIND was born in Lodz, Poland, on May 12, 1946. His parents, both Jews from Poland, had met and married in 1943 in Soviet Asia. Both had been arrested by Soviet officials when the Red Army invaded Poland in 1939 and had spent part of the war in Soviet prison camps. After the war, they moved to Lodz, his father's hometown. There they learned that 85 members of their families, including most of their sisters and brothers, had died at the hands of the Nazis.

BITTER & BREDT (2)

Libeskind and his family, which included his older sister, Annette, immigrated to Tel Aviv in 1957 and then to New York City in 1959.

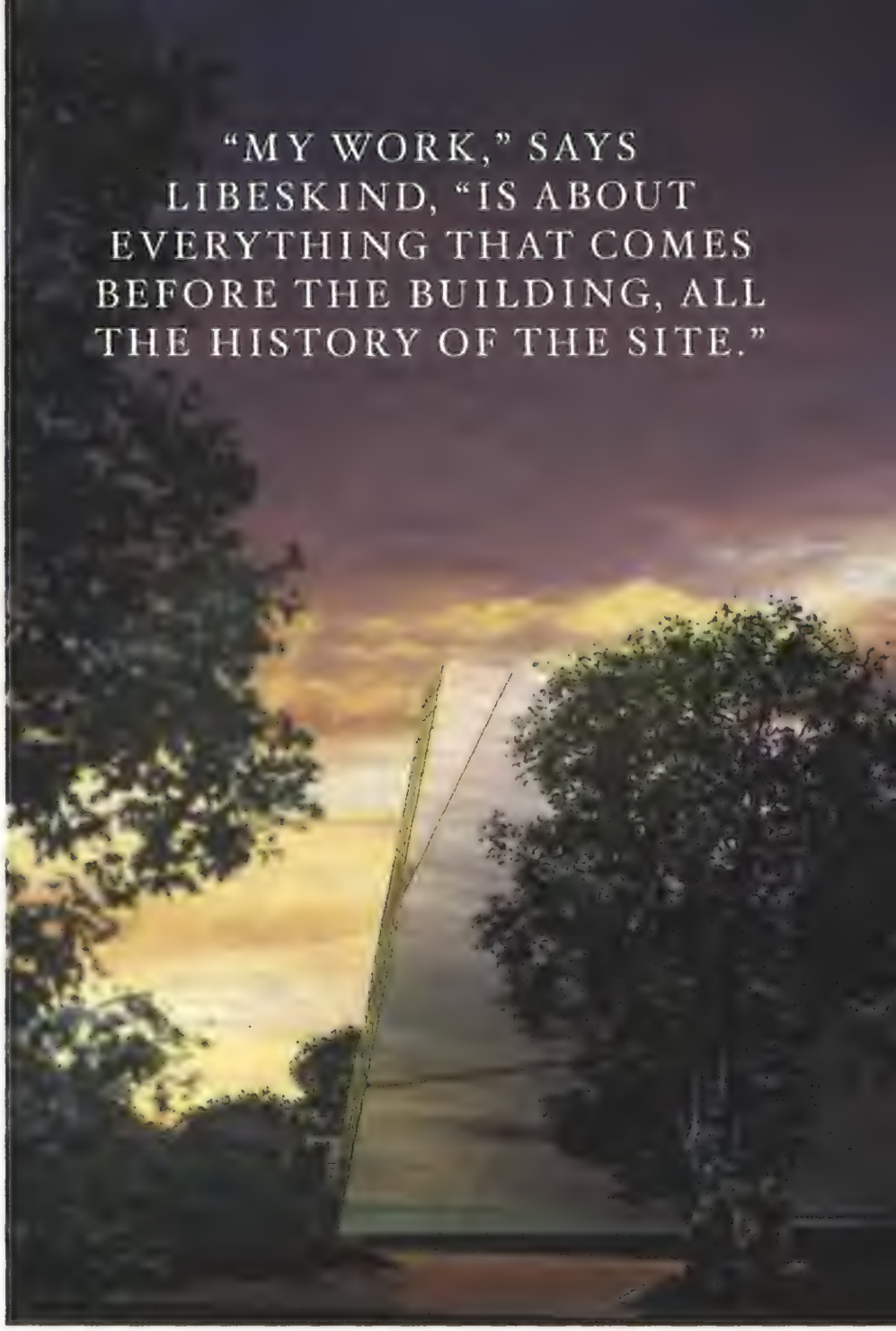
Had his childhood gone a little differently, Libeskind might well have become a pianist instead of an architect. "My parents," he says, "were afraid to bring a piano through the courtyard of our apartment building in Lodz." Poland was still gripped by an ugly anti-Jewish feeling after World War II, and his parents did not want to call attention to themselves. "Anti-Semitism is the only memory I still have of Poland," he says. "In school. On the streets. It wasn't what most people think happened after the war was over. It was horrible." So instead of a piano, his father brought home an accordion to the 7-year-old Daniel.

Libeskind became so adept at the instrument that after the family moved to Israel, he won the coveted America-Israel Cultural Foundation scholarship at age 12. It is the same prize that helped launch the careers of violinists Itzhak Perlman and Pinchas Zuckerman. But even as Libeskind won on the accordion, American violinist Isaac Stern, who was one of the judges, urged him to switch to the piano. "By the time I switched," says Libeskind, "it was too late." Virtuosos must begin their training earlier. His chance to become a great pianist had died in the anti-Semitism of Poland. After a few years of concert performances in New York (including at Town Hall), his enthusiasm for musical performance waned. He gradually turned instead to the world of art and architecture.

In 1965, Libeskind began to study architecture at the Cooper Union for the Advancement of Science and Art in Manhattan. The summer after his freshman year, he met his future wife, Nina Lewis, at a camp for Yiddish-speaking young people near Woodstock, New York. Her father, David Lewis, a Russian-born immigrant, had founded the New Democratic Party in Canada—a party with labor union support and social democratic ideals. Her brother, Stephen, was Canadian ambassador to the United Nations from 1984 to 1988 and is now a U.N. special envoy to Africa working on the AIDS issue. She and Libeskind were married in 1969, just before he entered his senior year at Cooper Union.

By all accounts, Nina Libeskind, despite a background in politics rather than architecture, has played a major role in her husband's career. Libeskind calls her his inspiration, accomplice and partner in the creative process. While photographer Greg Miller took pictures of Libeskind for this article, I remarked to Nina how patient her husband seemed, cheerfully following Miller's orders for almost an hour, complimenting the photographer on his ideas and continually asking questions about his work and equipment. Nina replied that her husband lacks the oversize ego of some architects. "He says that's because of the way I keep him in line and make him laugh," she added. "But I think it's just his personality."

Those who know the couple well say she is his contact



Libeskind calls his extension to the Denver Art Museum, scheduled to open in 2006, a "Nexus" that ties together the city's cultural downtown. With sections flaring out like flower petals, the addition will double the size of the museum.

with the real world—choosing competitions, negotiating contracts, running the office, driving the family car—so that he can keep conjuring architectural ideas. "There's no such thing as Daniel without Nina and Nina without Daniel," says his friend Kipnis, the Ohio State professor. "He would never have done anything without her. She is the force behind Daniel. Daniel's lazy. He would rather curl up and read a book. She's not a slave driver, but she supplies the work energy that he is missing."

Equipped with a master's degree in the history and theory of architecture earned in 1971 from the University of Essex in England, Libeskind worked for several architectural firms (including that of Richard Meier, designer of the Getty Center in Los Angeles and a fellow competitor for the World Trade Center site design) and taught at universities in Kentucky, London and Toronto. Then, in 1978 at the age of 32, he became head of the school of architecture at the highly regarded Cranbrook Academy of Art in Bloomfield Hills, Michigan. In his seven years there, he attracted

notice, but not as a successful designer of buildings—rather, as an advocate of buildings that are not only beautiful but also communicate a cultural and historical context. "I didn't enter competitions," he says. "I wasn't that kind of architect. I committed myself to other things, writing, teaching, drawing. I published books. I never thought I was not doing architecture. But I was not actually building."

New York architect Jesse Reiser recalls that when he graduated from Cooper Union, the late John Hejduk, dean of architecture and Libeskind's mentor, told him that he could go on to Harvard or Yale—or to Cranbrook. At Harvard or Yale he would surely earn a distinguished degree. But if he chose Cranbrook, he would be challenged. "Daniel will give you an argument a day," Hejduk told Reiser, "but you will come out of it with something different."

Reiser, who is considered one of today's most adventurous young architects, studied with Libeskind for three years. (Reiser is part of the team called United Architects that also presented a proposal for the World Trade Center site, which the *Washington Post* called "entrancing, dramatic and quite pragmatic.") "He was amazing," Reiser says. "He would come in the room and launch into a monologue, and then we'd have a discussion that could last six hours at a stretch. He is just an encyclopedic individual." Libeskind did not try to pressure his students into designing buildings just the way he might. Instead, says Reiser, "His most important teaching was to instill a certain sense of intellectual independence."

During these years, Libeskind made a series of sketches vaguely related to the plans that architects create. But Libeskind's drawings could not be used to construct anything; they look more like sketches of piles of sticks, and floor plans of destroyed buildings. Libeskind says they are, among other things, about "exploring space." Some of these works—the pencil drawings that he calls "Micromegas" and the ink sketches that he calls "Chamber Works"—are so highly prized they toured American museums from January 2001 to October 2002 in an exhibition sponsored by the Wexner Center of the Arts at Ohio State University and the Museum of Modern Art in New York.

In 1985, a peripatetic Libeskind left the Cranbrook Academy in Michigan and founded a school called the Architecture Intermundium in Milan, Italy, where he was the sole instructor of 12 or 15 students at a time. "I gave no degrees," he says. "The institute was founded as an alternative to traditional school or to the traditional way to work in an office. That's the meaning of the word 'intermundium,' a word that I discovered in [the works of 19th-century poet Samuel Taylor] Coleridge. The school was between two worlds, nei-

MILLER HARE

ONE CRITIC CALLS THE VICTORIA AND ALBERT ADDITION "A DISASTER FOR CIVILIZATION." THE MUSEUM'S DIRECTOR SAYS IT'S "A BUILDING OF OUTSTANDING GENIUS."

ther the world of practice nor of academia."

The transformation of Libeskind from teacher, philosopher and artist into a builder came swiftly. A 1987 exhibition of his drawings in Berlin prompted city officials to commission him to design a housing project there. That project was soon abandoned, but his Berlin contacts encouraged him to enter the competition for the far more important Jewish Museum.

After submitting his entry, Libeskind telephoned his friend Kipnis to say he had given up any hope of winning but believed his proposal "would surely make an impact on the jury." It did. At the age of 42, he had won his first major architectural commission. "I honestly think he was as surprised as anyone," says Kipnis.

At the time, Libeskind had just accepted an appointment as a senior scholar at the Getty Center in Los Angeles. The family's belongings were on a freighter making its way from Italy to California as the architect and his wife collected the award in Germany. The pair were crossing a busy Berlin street when his wife admonished him, "Libeskind, if you want to build this building, we have to stay here." The family moved to Berlin. Libeskind, who once preferred teaching to building, then became, in the words of Kipnis, "a consummate competition architect." In a span of about 15 years, he won commissions for the dozen or so projects now in progress. In addition to the North American works, they include a concert hall in Bremen, a university building in Guadalajara, a university convention center in Tel Aviv, an artist's studio in Majorca, a shopping center in Switzerland and a controversial addition to the Victoria and Albert Museum of London.

"Always solo. Only Baroque music," says Libeskind (about age 12) of his accordion concerts. He now designs sets and costumes for Wagner operas.

THE JEWISH MUSEUM OF BERLIN is a stunning, zinc-clad structure that zigs and zags alongside an 18th-century former Prussian courthouse that now houses the museum's visitor center. Libeskind says its thunderbolt shape alludes to "a compressed and distorted" Star of David.

The zinc building has no public entrance. A visitor enters through the old courthouse, descends a staircase and walks along an underground passageway where wall displays tell 19 Holocaust stories of German Jews. Branching off the passage are two corridors. One goes to the "Holocaust Tower," a cold, dark, empty concrete chamber with an iron door that clangs shut, briefly trapping visitors in isolation. The second corridor leads to a tilted outdoor garden made of rows of 20-foot-high concrete columns, each with vegetation spilling from its top. Forty-eight of the columns are filled with earth from Berlin and symbolize 1948, the year the State of Israel was born. A 49th column in the center is filled with earth from Jerusalem. This unsettling "Garden of Exile" honors those German Jews who fled their country during the Nazi years and made their home in strange lands.

Back on the main passageway, "The Stairs of Continuity" climb to the exhibition floors, where displays recount the centuries of Jewish life and death in Germany and other German-speaking areas. (The officials finally agreed the museum would be a catalog of German-Jewish history.) Among the displays are the eyeglasses of Moses Mendelssohn, a 17th-century philosopher and grandfather of composer Felix Mendelssohn, and futile letters from German Jews seeking visas from other countries. One powerful theme emerges: before the rise of Hitler, Jews were a vital and integral part of German life. They were so assimilated that some celebrated Hanukkah with Christmas trees and they called the season *Weihnukkah*—from *Weihnacht*, the German word for Christmas.

But the displays are only part of the experience, says Ken Gorbey, a consultant who served as project director of the museum from 2000 to 2002. Libeskind, he says, has designed the interior to mimic the feelings of a disrupted culture. "It's architecture of emotions, especially disorientation and discomfort," says Gorbey. Visitors navigate sharp corners, climb into alcoves and slip into half-hidden, isolated areas.

These intentionally confusing spaces are created in part by a long void that cuts through the length and height of the museum. Sixty walkways cross this empty space and connect the cramped exhibition areas. Libeskind describes the void in the building's heart as "the embodiment of absence," a continual reminder that the Jews of Germany, who numbered more than half a million in 1933, were reduced to 20,000 by 1949.

Mark Jones, director of the Victoria and Albert Museum,

DANIEL LIBESKIND

Libeskind's challenge in designing an extension to London's Victoria and Albert Museum was, he says, to "make the old work with the new." His solution (in this computer rendering) is a six-story labyrinth of links to the existing galleries.

says it is these dramatic interiors that set Libeskind apart from other architects. "People think, for example, that Gehry and Libeskind are alike because they both design unusual buildings," Jones says. "But with Gehry's Bilbao, for example, the exterior is an envelope for the interior. With Daniel's buildings, there is a complete integration between the interior and the exterior."

Like the Jewish Museum, the Imperial War Museum of the North in Manchester, England, is designed both inside and out. To create the English museum, Libeskind imagined our planet shattered into pieces by the violence of the 20th century. In his mind, he then picked up three of these shards, clad them in aluminum and put them together to create the building.

He calls the interlocking pieces the Air, Earth and Water Shards, symbolizing the air, land and sea where wars are fought. The Earth Shard, which contains the main exhibitions, looks like a piece of the curved rind of the Earth. This building—including the floor inside—curves six feet downward from its highest point, which is, in Libeskind's imagination, the North Pole. The Water Shard, a block whose concave shape suggests the trough of a wave, houses a restaurant that peers out onto the Manchester Ship Canal. The Air Shard is a 184-foot-high, tilted, aluminum-covered structure that features a viewing platform.

The museum, a branch of the Imperial War Museum in London, displays machines of war, such as a Harrier jump jet and a T-34 Russian tank, against a visual and sound show that overwhelms the senses while narrating war's grimness. But Libeskind's design tells the dreadful story as well, from the unnerving fragmented shapes to the disorientation caused by walking across the curved floor. "The whole message of the museum is in the building itself," says Jim Forrester, the museum's enthusiastic director. "The principle is that war shapes lives. War and conflict shatter the world; often the fragments can be brought together again but in a different way."

Libeskind's design for an addition to the venerable Victoria and Albert Museum in London, known for decorative arts, has not been as enthusiastically received. The project won the unanimous approval of the museum's trustees in 1996, but it provoked irate protests from some critics. William Rees-Mogg, former editor of *The Times* of London, denounced the proposed building, known as the Spiral, as "a

MILLER HARE

HE LACKS THE OVERSIZE EGO OF SOME ARCHITECTS. "THAT'S BECAUSE I MAKE HIM LAUGH," SAYS HIS WIFE, NINA.

disaster for the Victoria and Albert in particular and for civilization in general." Rees-Mogg and other critics insist that Libeskind's design simply does not fit with the Victorian buildings that currently make up the museum.

In actuality, Libeskind's so-called Spiral does not look like a spiral at all. Instead, he envisions a series of ascending cubes, all covered in ceramic tile and glass, that fit together and provide access through six passageways to all the floors of the adjacent museum buildings. The Spiral would serve as a second entrance to the Victoria and Albert and would house the collections of contemporary decorative art that are now scattered throughout the old buildings.

The Spiral's defenders are just as determined as its detractors, and Libeskind's design has won approval from all the required planning and art boards in London. But the museum must come up with $121 million for the project, which Libeskind hopes will be completed in 2006. Mark Jones, director of the museum, seems confident about raising the money. "The Spiral is a building of outstanding genius," he says. "I choose these words carefully. I think not to build it would be a shame. It's a rare opportunity to make a building of this distinction come into existence."

Libeskind's design for the World Trade Center site has so far suffered no such controversy. His studio was among the seven teams of architects chosen by New York's Lower Manhattan Development Corporation to submit designs for the site of the terrorist attack of September 11, 2001. When the proposals were unveiled in December, Libeskind's drew rave reviews.

"If you are looking for the marvelous," wrote Herbert Muschamp, architecture critic of the *New York Times*, "here's where you will find it." Benjamin Forgey, architecture critic of the *Washington Post*, pronounced Libeskind's design his favorite: "Every piece of his surprising, visually compelling puzzle seems somehow to relate to the difficult meaning of the site." Paul Goldberger, of the *New Yorker*, called the design "brilliant and powerful."

On February 4, Libeskind's plan was selected as a finalist in the competition, along with that of the team Think, led by New York City-based architects Rafael Viñoly and Frederic Schwartz. Muschamp of the *Times* had endorsed the Think team's design in January, calling it "a work of genius." A final decision was to be made by the end of February.

Libeskind says his design attempted to resolve two contradictory viewpoints. He wanted to mark the site, he says, as "a place of mourning, a place of sadness, where so many people were murdered and died." At the same time, he felt the design should be "something that is outward, forward-looking, optimistic, exciting."

His proposal would leave Ground Zero and the bedrock foundations of the Twin Towers uncovered as, he says, "sacred ground." An elevated walkway would encircle the 70-foot-deep hole. Libeskind would also create two public spaces as memorials: the "Park of Heroes," in honor of the more than 2,500 people who died there, and an unusual outdoor space called the "Wedge of Light." To create this wedge of light, Libeskind would configure the buildings on the eastern side of the complex so that, on September 11 of every year, no shadows would fall on the area between 8:46 a.m., the moment when the first plane struck, and 10:28 a.m., when the second tower collapsed.

"The first marriage of form and function wasn't in the Bauhaus," a cowboy-booted Libeskind told the *New York Times* in January. "It was in the Old West."

The main building of Libeskind's creation would be a thin tower that would climb higher than the Twin Towers and would, in fact, become the tallest building in the world. "But what does that mean?" says Libeskind. "You can have the tallest building one day but find someone else has built a taller one the next. So I picked a height that has meaning." He set it at 1776 feet. This tower would have 70 stories of offices, shops and cafés. But its spire—perhaps another 30 stories high—would house gardens. The tower would stand alongside a 70-story office building and connect to it with walkways.

Libeskind calls this iconic building the "Gardens of the World." "Why gardens?" he asks in his proposal. "Because gardens are a constant affirmation of life." For Libeskind, the tower rises triumphant from the terror of Ground Zero as the New York skyline rose before his 13-year-old eyes when he arrived by ship after his childhood in war-embittered Poland. The spire would be, he says, "an affirmation of the sky of New York, an affirmation of vitality in the face of danger, an affirmation of life in the aftermath of tragedy." It would demonstrate, he says, "life victorious." ○

STEVE HART

WHEN YOU QUIT WORKING MAKE SURE YOUR MONEY DOESN'T.

WE LIVE WHERE YOU LIVE.™

As you get ready for retirement, consider State Farm annuities. With flexible payouts and guaranteed income, they let you customize your plans and help keep your money working while you explore your dreams. For more information on annuities, call your neighborhood State Farm agent or visit us at *statefarm.com*.®

LIKE A GOOD NEIGHBOR STATE FARM IS THERE.™

STATE FARM INSURANCE

Providing Insurance and Financial Services

L2002-19 02/03 *State Farm Life Insurance Company (Not in NY or WI) • State Farm Life and Accident Assurance Company (In NY and WI) • Home Offices: Bloomington, IL*

JILL FREDSTON AND DOUG FESLER, who are married and live in Anchorage, are gaining recognition outside Alaska for the thousands of miles they have covered in their converted sea kayaks—her recently published memoir, *Rowing to Latitude: Journeys Along the Arctic's Edge,* lyrically documents their watery adventures—but around the Last Frontier they are perhaps best known for their deep knowledge of snow and ice. As codirectors of the Alaska Mountain Safety Center, they are called on to rescue avalanche victims. At the affiliated Alaska Avalanche School, they hold classes in forecasting and avoiding snowslides. (Snowslides killed 11 people in Alaska and another 24 in other states in the year ending June 2002—the highest toll in modern times, thanks to the growing number of backcountry hikers, skiers and snowmobilers.) Fredston and Fesler's 1984 self-published book, *Snow Sense: A Guide to Evaluating Snow Avalanche Hazard,* has sold more than 100,000 copies. Filmmakers have hired the couple to trigger avalanches for the camera. One piece of footage has been resold so many times they often find themselves watching a documentary or feature film and saying, "Hey, that's our avalanche!"

Fredston, 44, and Fesler, 57, have investigated hundreds of avalanches, trying to learn more about what causes them, and they have raced to dozens of accident scenes to rescue victims. Fredston recalls the first time she was part of a team that dug out someone buried alive by an avalanche. "He was a volunteer fireman. He had bought a house right in the path of the avalanche. There was wreckage strewn for hundreds of yards." The man had been buried for six hours in 15 feet of snow that had thundered down onto Cordova, Alaska, a couple of hundred miles from Anchorage, in January of 2000. "It took us more than an hour to get down to him." The man's partner, however, didn't make it; the rescuers found her in a chair in front of the TV, the remote control still in her hand.

Bystanders at avalanches, she says, have an understandable urge to seek assistance for those who've been trapped. "We try to tell people, don't go for help," she says. "You *are* the help." Time is critical. Nearly everyone buried by an avalanche, Fredston says, remains alive for 15 minutes, and about half are still breathing after 30 minutes. Most avalanche deaths could be avoided; it's usually the victim who sets off the avalanche to begin with. She remembers a man who was buried up to his waist one morning, extracted himself, then returned to the area, only to be entombed in snow.

An avalanche, which can weigh thousands of tons and travel more than 200 miles per hour, is essentially a body of snow that has lost its grip. There are four main types: a loose slide, in which the topmost layer of snow tumbles down a slope; a cornice collapse, in which an overhanging snow mass breaks off; an ice avalanche, which occurs on glaciers; and, the one that traps the greatest number of backcountry visitors, a slab avalanche, in which a mass of snow detaches from a slope. A sudden disturbance, including a stimulus seemingly as slight as a hiker's steps, or the sheer force of snow's own weight, can shake snow loose and send it roaring down a slope. To preempt deadly slides, avalanche specialists deliberately trigger slides by setting off explosions near ski areas, roadsides and other high-risk zones. Around Anchorage, Fredston and Fesler, when they're not teaching avalanche science and safety, ski or hike into avalanche areas to assess hazards by gauging a snowpack's stability. Sometimes they helicopter in and toss 5- to 30-pound explosives onto a precarious slope to get the snow rolling.

In some ways, they seem an unlikely couple. She is wiry and petite, from well-to-do Westchester County outside New York City, a focused student who earned a bachelor's degree in geography and environmental studies at Dartmouth College and a master's degree in glaciology at Cambridge University. (She rowed competitively for both schools.) While hiking in Alaska after grad school, she landed a job at a state avalanche forecast center in Anchorage. By contrast, the tall and burly Fesler had more of a knockabout youth, growing up in New York but also in

ICE CAPADES

Alaska's husband-and-wife team of avalanche experts work to save lives all winter, then take to their kayaks in summer

BY MICHAEL RYAN

Deep within the Arctic Circle, Fredston (above) passes Norway's Spitsbergen Island in 1996. Fredston and Fesler (left) have rowed together 16 summers.

Ascending a snowpack after an avalanche in Alaska's Chugach Mountains, Fredston (above, left) takes measurements to glean clues to the slide. Following a Cordova, Alaska, avalanche in 2000 (above, right), she helped rescue one victim; another died.

Chicago and Boston suburbs. In the summers of 1966 and 1967, between terms at North Dakota State University, he hitchhiked to Alaska, where he worked as a longshoreman, ditchdigger and carnival hand, among other odd jobs. After earning a degree in sociology and education, he returned to Alaska. Later, as a park ranger, he gained so much experience with snow survival techniques and avalanche behavior that the state hired him to do rescues and avalanche forecasting.

Then, as the Hollywood saying goes, the two met cute and fell in love, with Fredston playing the perky but tough Katharine Hepburn to Fesler's grumpily amiable Spencer Tracy. His bosses, who had hired the then 24-year-old Fredston to work in the avalanche forecasting center, made her the director—a move he opposed. As she recalls it, "First he was my opponent, then my reluctant mentor, then my mentor, then my husband." They've been married 13 years and now live in a tall-windowed house they built themselves in Bear Valley, south of downtown Anchorage, with views of the Chugach Mountains to the east and Cook Inlet to the west. They became business partners and started the safety center in 1986, after the state eliminated its avalanche operations the same year.

It's harsh, sometimes dispiriting work—more than once they've dug into a snowslide and found the body of a friend—but the freedom keeps them going. "There's a different mentality here," she says of Alaska. "I go back to the East Coast, and all people want to know is where you went to school."

"It isn't all figured out," he says. "I like being in a place where everything isn't figured out."

COME THE THAW and the midnight sun, they hit the water, stuffing a few hundred pounds of provisions and gear, including a shotgun (mainly for protection), into two sea kayaks they've transformed into rowboats. Leaving for sometimes months at a stretch, they have explored the north shore of Alaska as well as parts of Labrador, Greenland and Norway. Last year, they covered 600 miles of the Arctic Ocean along the Northwest Passage, to Paulatuk, Northwest Territories, Canada. In 16 summers, they have rowed 22,000 miles.

They have been jammed up in pack ice and have portaged gingerly over tippy floes and ice so thin it reminded Fredston of rice paper. Whales have surfaced near their boats and nearly swamped them. Storms have threatened to capsize them. Bears have accosted them. Camping last summer in the Northwest Territories, a grizzly bear shredded their tent one night. (Fredston scared the beast away by shouting, "Hey, Bear!") They toss off stories of extraordinary dangers the way other people complain about the hassles of their morning commute. "The few times I can remember fear have been from big waves

MICHAEL RYAN, a documentary filmmaker, wrote about a man who wrangles icebergs in the January 2003 issue.

DOUG FESLER; ANCHORAGE DAILY NEWS; P. 86, 87 JOHN BAUMAN; P. 86 SUNNA FESLER

"Doug and I are drawn to northern latitudes not out of sheer perversity, as our families claim, but because we seek wild country," Fredston (crossing Uummannaq Fjord in northern Greenland in 1998) writes of the rowing treks with her husband.

on the northern coast of Norway and 12- to 15-foot waves off Labrador," Fesler says. "It's part of the learning curve. You have to get yourself into these situations to learn how to avoid them."

Fredston's parents eagerly support her adventures, but that doesn't keep them from fretting, she writes in *Rowing*: "No matter how much I cajole and reassure [my mother], she worries whenever we are beyond the comforting reach of telephone or mail. My father says she is exuberant the first week after I call to confirm we are still afloat, tolerable the second, irritable the third, and impossible by the fourth. I've come to realize that Doug and I don't go on trips by ourselves; our families and friends are with us, and the decisions we make ripple beyond the shores within view."

As it happens, her parents recently bought her a satellite phone, workable from virtually anywhere in the world. She turns it off a lot. She doesn't want her mother calling, Fredston likes to joke, when a polar bear is on her tail.

But what life is without danger, really? Her father, Arthur Fredston, a courtly Manhattan attorney, was walking near the World Trade Center on the morning of September 11, 2001. Her mother, Elinor Fredston, was diagnosed with peritoneal cancer almost six years ago. It was word of her mother's illness that prompted Jill to start writing about her own life, as though to explain it to her mother. That account would grow into *Rowing to Latitude*, published last year to warm reviews and dedicated to her mother, who is in good health, and her father. So, compared with terrorism and cancer, what's an occasional polar bear?

One afternoon last September when a plaza in Anchorage was still abloom—to a newcomer, the city appears improbably rich in flowers—Fredston was only a couple of weeks off the water, her hands still calloused from hundreds of hours of pulling oars. "They really are not adventures for us," she said of the trips. "They're a way of life. . . . I know a woman who lives in a village up north. She could live anywhere. I asked her why she lives there, and she said, 'Here I have time to do anything I want. I have time to do my art, to pick berries, to go on trips. There really is a freedom that comes from having not so many choices.'"

Fesler says, "It's about enjoying when the sun comes out. I don't have to worry about the stock market or what's going on in Afghanistan."

Having rowed almost the distance of the earth's circumference, Fesler and Fredston say when they're done with the Arctic, possibly in a few years, they might head to Patagonia, Tierra del Fuego and the challenges of the south. "We know it can't go on forever," Fredston says. "It gets harder and harder on the knees. It takes time to recover. But we'll keep going."

Fesler says, "I need the wildness." ○

DOUG FESLER

Bonding with the big cats: Kraft likes to go one-on-one with his charges (including Aladdin, a Bengal tiger, left, and Bam Bam, a cougar, above). "They come and lie in my lap and snuggle right up to me," he says.

TO THE RESCUE

Las Vegas showman Jonathan Kraft went from riches to rags to turn a patch of Arizona desert into a refuge for abused and abandoned exotic animals

BY PAUL TRACHTMAN

PHOTOGRAPHS BY THOMAS MICHAEL ALLEMAN

THERE'S A HINT of the ballroom dancer about Jonathan Kraft as he glides into a cage with two large tigers, Natasha and Samantha. We're in the middle of nowhere, a flat stretch of Arizona desert, 33.5 barren acres in all, just over the Nevada state line, a 45-mile drive from Las Vegas. In this unpromising terrain, Kraft is carving out a refuge for more than a hundred exotic animals. At the sanctuary, known as Keepers of the Wild, most of his charges are abused or confiscated big cats and other large-mammal predators. "Samantha used to be called the headhunter," he says. "She'd attack anything that moved." Leaving me safely outside the bars, Kraft sets to work scooping up droppings and raking the sand on the floor, a morning ritual. "Many times," he adds, "I've had to cha-cha around the cage without letting the animal get the idea that I'm running. The only reason I haven't been killed or maimed is that I think one step ahead of them. Why do they trust me? I've never figured it out."

This morning, the tigers are still holed up in their large plywood den box at one end of the cage. Samantha's face and paws protrude from the cutout door. Kraft decides to crawl in. He shoves Samantha's head aside, clambers over her legs and disappears. I can hear him talking to them as he sits in the dark. When he emerges, Samantha follows. "OK, pussy," he says. "Get up there and give me a hug." She leaps onto the roof of the den box and embraces him around the neck. "She's a lover," he laughs. "She's a beautiful cat."

This is no act, although Kraft was a Las Vegas entertainer when he started rescuing exotic animals nearly 15 years ago. "I was always great with animals," he says. "I just didn't know I was at my best with lions and tigers!" A trim dynamo of a man in his mid-50s, he grabs a morning cup of coffee and never stops talking—to volunteers, to the animals, or, by telephone, to bureaucrats about securing building permits and to veterinarians about treatment options, debating the merits of pills versus injections, for a sick cougar. He once ran a chain of dance studios, then turned to producing a magic show on the Las Vegas Strip. This led him, by a circuitous route, to create an exotic-animal theme park behind the Aladdin Hotel. He dubbed

that enterprise Predator's Paradise. "I started out buying two baby tigers, for all the wrong reasons," he says. "I know that now, but I didn't know it then."

Ever the entrepreneur, he had, in 1987, decided to incorporate animals into his traveling magic show. At the time, he presided over choreographers, showgirls, musicians and set designers, with the production transported by an 18-wheeler. At first, a small menagerie of exotic animals might have seemed like just another prop. But then, the pair of cubs proved too small—they were dwarfed by the huge stage props—so he brought in full-grown tigers.

Before long, Kraft had taken on nearly a dozen big cats, wolves and other predators, as well as a crew of animal handlers to care for them. Then the contract for his animal park wasn't renewed. Suddenly, he was left with a lot of animals to feed and a pack of creditors to fend off.

Kraft had already rented and renovated space for his animals in the condemned section of a Las Vegas dog pound. Each day, he followed the same routine, transporting the animals by truck to spend their waking hours in the relative paradise of his theme park and their nights in the rented quarters. When the theme park closed, he knew he had to find the animals a better home.

PAUL TRACHTMAN profiled cowboy Buck Brannaman, an equine trainer who is renowned as a "horse whisperer" in May 1998.
THOMAS MICHAEL ALLEMAN photographed the story on palm trees in the August 2002 issue.

At the nonprofit Keepers of the Wild, habitats for creatures from tigers to wolves should be completed before summer; plans also call for an animal hospital and research library. "We came from virtually nothing in only eight years," says Kraft, who estimates the project's total cost at $25 million.

As soon as he established Keepers of the Wild as a nonprofit entity in 1995, Kraft began looking for donors, volunteers and a place for the animals to roam free. He was determined that the location approximate a variety of natural habitats. But the transition from show business impresario to chief cook and bottle washer of a nonprofit sanctuary wasn't easy. Before long, in fact, Kraft was surviving on peanut butter and jelly sandwiches or cooking up for himself portions of the chicken he fed the animals. He still had a big house, lots of jewelry, an 18-wheeler and all the trappings of a show business career. But he was selling or pawning most of it to support the sanctuary. "I've always been a good salesman," he says. "But before, I demanded money because I had a product. Now I had to hold my hand out. 'Give me a donation!' It's like being a beggar on the street!" He sent a fund-raising appeal to every casino in Las Vegas: his only response was a hundred bucks from Caesar's Palace.

"Many times I didn't think I was going to make it," he says, "but there was no way I could walk away from the animals."

And he was acquiring more of them all the time. Other animal-training entertainers on the Strip started sending him animals they couldn't handle, or those too old to perform.

One time the mother of a popular Las Vegas performer called to say she wanted to give him a tiger. When Kraft arrived at her house, he found a female lion with a broken leg and, in a small wire cage, a young male lion close to death, in addition to the tiger. Starving, flea-bitten and filthy, the young male, Sabu, could barely lift his head. Kraft insisted that he take all three animals, but the owner refused. She didn't want her mistreatment of these exotic pets known. She claimed she would have Sabu humanely put down. Kraft left empty-handed—and angry. After a sleepless night, he returned, cajoled the woman into turning over to him the tiger and the two lions, and loaded them into his Bronco and a trailer.

The veterinarian he called in diagnosed Sabu with rickets and arthritis. The lion's feet had been maimed in an attempt to declaw him. His jaw was broken. The kindest thing, recommended the vet, would be to euthanize the big cat. "I would have agreed, if we couldn't ease his pain, and if there was no chance to save him," says Kraft. But there was a slim hope that Sabu would survive. The vet prescribed an arsenal of medications. Kraft spent almost every minute of the next few days with the lion, talking to him, feeding him, nursing him, even sleeping on the straw at Sabu's side. As the animal slowly recovered, man and beast formed a deep bond. Whenever Kraft approached, Sabu would leap up and hug him. After nine good years at the sanctuary, the lion died October 13, 2000. "That was," Kraft says, "one of the saddest days of my life." He keeps an urn with the lion's ashes in his office.

As the size of Kraft's menagerie rose from a dozen ani-

Although Kraft (cosseting Natasha, a Bengal tiger, above) dotes upon his cats, the former showman (whose Las Vegas act, right, featured exotic animals) never forgets the predators' power: "They absolutely do not make pets."

BOTTOM: JONATHAN KRAFT COLLECTION

"When you go from a career onstage to cleaning up animal droppings, you learn an important lesson: swallow your pride—it's nonfattening," says Kraft (with Sheba, a 14-year-old, 400-pound Bengal tiger). Some 30 volunteers also pitch in.

mals to 50, he grew increasingly desperate. He met with realtors and zoning officials and made engineering and design presentations before town boards, city councils and county commissioners. The answer was always the same: not in my backyard. His landlord, the owner of the property behind the dog pound, attempted to kick him out. To make matters worse, his show business creditors were suing him. He recalls the day some repo-minded folks showed up with a horse trailer and the police to seize three tigers and a black jaguar as settlement of a debt for advertising fees. When Kraft refused to load the trailer, his creditors prepared to dart the animals and cart them off. "I told them, 'if you kill a cat, you might as well kill me, because if you don't, I'll strangle you with my bare hands.'" For four hours, a noisy standoff ensued. Finally, Kraft managed to make a few calls and pawn enough possessions to pay off the debt.

To save money on rent, Kraft installed a bed and a big-screen TV in one of the cages and moved in next to his animals. At night, he allowed a tiger or a lion, uncaged, to prowl the corridors of the compound. "A cat would climb into my bed and watch TV," he says, "until he got bored. Then I'd put him back in his cage and let another one loose." He lived like that for four years. Kraft is fanatical when it comes to giving his animals a healthy diet, lots of exercise and scrupulously clean surroundings. To accomplish that in a dismal cinder-block labyrinth of windowless corridors lined with wire cages required heroic efforts.

Recently, Kraft returned to show me around the cheerless surroundings he left behind. Entering the abandoned facility, he drifts back in time. "There's always a lot to do," he says, "picking up droppings by the dozer full, bleaching floors, hosing them down, every day, it never stops. Water bowls have to be cleaned; pans washed; food thawed, measured out, given to the animals. You have to admire the volunteers: this requires passion, no question about it." He shows me the shell of the kitchen where he and 30 volunteers processed high-quality meals for the animals. "We kept it cleaner than many restaurant kitchens," he says. It's a point of pride for a lad who grew up in Holland, where his father was a five-star chef who had cooked for Queen Juliana. As a teenager, Kraft went to sea as a ship's waiter, fell in love with Canada and eventually moved to the United States.

As we step outside, Kraft points to a neon skyline. "I could see the Strip from my front yard," he says. "I watched the hotels getting built. It was very depressing to see all this glitz and glamour and here you are starving only a mile away, with all these gorgeous animals—all of whom were brought here by the Las Vegas entertainment industry. And nobody gave a damn."

But by 1996, word had gotten around. Helpers began showing up: a college student and a cop, a bartender and a

computer executive. They worked for nothing, maxed out their own credit cards to cover food and utility bills, even loaned Kraft their savings to keep the sanctuary going.

Many of the volunteers say they get along better with animals than with people. "The animals don't lie," says Kraft. "That's what I love about them. Animals are much more truthful than humans. You never have to guess what they think of you." What motivates the volunteers, he says, is not only love of animals but outrage at the ways people mistreat wild "pets." Individuals try to keep exotic creatures at home, at least until the animal attacks someone and then is defanged, declawed or put down. To Kraft, this amounts to mutilation and murder. "Abusing an animal should be a felony," he says, "just like abusing a child."

It's a 45-mile drive from Las Vegas along state highway 93, past empty stretches of barbed wire and tumbleweed, to the new home of Keepers of the Wild. To Kraft, finding this place seemed like a miracle. One night in June 1999, his latest proposal for a site in Nevada was turned down by the county board of commissioners. The raucous hearing happened to be televised on a local station. The next morning, a realtor who had seen the coverage called and told Kraft he knew the perfect place. Forty-five miles from Las Vegas lay a 33.5-acre expanse of desert, where an abandoned café fronts the highway. The site had its own well, a row of RV hookups for temporary volunteer housing, and a big warehouse where Kraft could install his kitchen, workshop and an infirmary for sick animals. The property could be leased with an option to buy. Kraft's eight-year search was over.

Food for the animals (volunteer Flo Narducci grinds medication before adding it to a dish) costs $10,000 a month. "Our chefs prepare 1,800 pounds of meat weekly," says Kraft.

Suddenly, donors began to surface, offering gifts and loans to renovate buildings and construct spacious holding areas for the animals. Within two months, Kraft and his volunteers hauled their by then 120 animals over the road that runs across the Hoover Dam to a new home.

Today, a refurbished restaurant, an ice cream parlor and a new gift shop help support the sanctuary. (After negotiating a loan, Kraft was finally able to buy the property last year for $2.5 million.) Las Vegas tour buses, Grand Canyon bound, stop for breakfast; on the way back, tourists disembark for a brief encounter with the animals. Kraft's show business instincts kick in as he leads Hope, a 140-pound black jaguar, into a large arena. Spectators gather on the other side of a tall fence. "She's a little devil," he tells them. "She was confiscated when a drug lord in Texas got busted; the agents found her on the property. They called me to rescue her. Otherwise she would have been euthanized." Kraft leans back against the edge of a table as Hope leaps up behind him. "Jaguars kill by crushing the back of the neck and skull," he says, as the cat climbs his back and licks his ear. Then she closes her jaws close on the back of his head. "There's the bite," he says. "Good girl," he tells her. Squirming out of her grip, he makes his pitch to the crowd to "adopt" an animal by making a donation, never failing to mention his Web site: www.keepersofthewild.org.

If it sometimes seems that these animals are tame, Kraft never forgets how deadly dangerous they actually are. During a typical morning's cage-cleaning routine, a longtime volunteer and Kraft's fiancée, Tina Matejek, follows along as Kraft's backup. At the moment, while bulldozers break ground for their future habitats, the animals live in rows of large wire cages set on the sand. "This is Bonnie," Kraft says, stepping into a big cat's cage. "She's a 450-pound female Siberian tiger, very hyper and quite dangerous. I'm going to have her spayed and place her with Raja on two acres, in the new habitat."

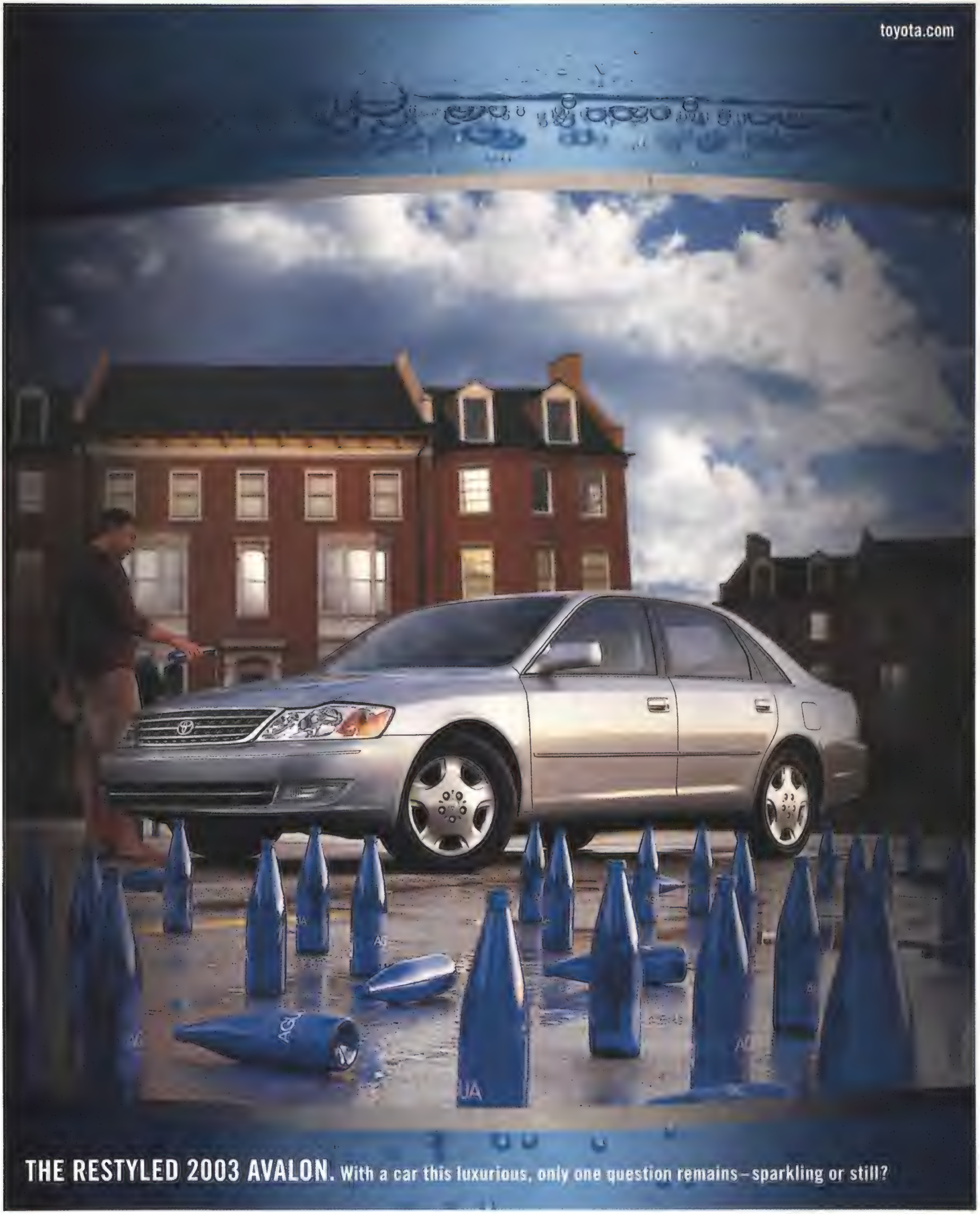
Raja, a 750-pound male Siberian tiger who looms ten feet high when standing on his hind legs, is in the next cage. "I've seen him jump out of a pool and land 40 feet away," Kraft says. Raja once bit him on the arm, drawing blood. "He wasn't really trying to attack me. I was brushing his mane and I guess he got irritated. I smacked him on the nose and he backed up. Then I showed him what he did and made him lick off the blood. A lot of people would say that's stupid because he's a predator. If they see blood, they'll attack. Bull. Cats don't do that. I demand respect from them, and I know they demand respect from me."

A huge male lion, lacking a mane, peers from an adjoining cage. "This is Elvis," Kraft says. "He was owned by a stripper who couldn't control him. So she had him neutered. That's why he has no mane. She hired trainers who abused him until he attacked them. He's 75 percent blind from the beatings. Then she sold him to a guy who tried to control him by siccing five or six rottweilers on him. That fellow was jailed for animal abuse. Elvis ended up in the dog pound in Henderson, Nevada. They called me. When I got there, I told them to let me in the cage. They said, 'Oh no, he's too dangerous, he's already eaten three trainers.' I said, 'If you want me to take him, open the damn cage and let me in.' I just talked to Elvis for ten minutes, put a leash on his neck and put him in the back of my Bronco. He filled up the whole truck, and I took him home."

In the next row, Kraft enters a cage with two female Bengal tigers, sisters who have been with him for 14 years. One of them, Sammy, attacked one of the most experienced volunteers last March, clamping down on his leg, knocking him down and dragging him into the cage. No one at the sanctuary has forgotten it. Kraft slaps Sammy on the rump as he cleans the cage: "You are a bit of a brat, aren't you!"

Kenya, a 10-year-old lion (with volunteer Tina Matejek), was nearly starved at a roadside zoo. Because his growth was stunted, the 300-pound cat will not reach the normal weight of 550.

It was, to be sure, a terrifying moment. The volunteer, Scott Burns, had worked with big cats for ten years. When Sammy went for him, his backup, Matejek, leaped into the cage to try to call the tiger off. Kraft arrived seconds later. "Tina and I were screaming at Sammy to let go," Burns says. "I tried kicking her, but she released my leg only to grab the other. By that time, Jonathan had come in and was kicking her head. She wouldn't have any of that. Tina got Jonathan a 3- by 6-foot iron rack, and he started butting it into the tiger's head. I threw handfuls of sand in her eyes and nose so she couldn't see or breathe. Finally, faced with that barrage, she did let go. Jonathan put the rack in front of her and I scooted out. She made one last lunge at me, but Jonathan shoved the rack in her face. Otherwise she would certainly have had me,


toyota.com
THE RESTYLED 2003 AVALON. With a car this luxurious, only one question remains–sparkling or still?
GET THE FEELING
TOYOTA

©2002 Toyota Motor Sales, U.S.A., Inc.

because I was crawling. She would have been on top of me, and I would have been in a lot worse shape."

"She would have killed him," Kraft says quietly. "Maybe she sensed a weakness in him, or maybe she just wasn't right that day, but these are wild predators and that instinct to attack is always there. You're never really in control, if you think about it. Even when I don't look, I can tell when they're making a move on me. I can just feel it. They may not want to kill me, they may just want to jump me. I'll just turn around and tell them, 'Don't even think about it!' and they'll shudder and pull back."

Burns was helicoptered to the hospital. He survived, with lacerations and vivid nightmares. But he got back to work about a week later, as soon as he could walk. These days he enters the cages with the other big cats but leaves Sammy alone. He's philosophical about the experience, expressing the spirit of the sanctuary. "An animal can decide she just doesn't like me. We're not going to force that animal to like me or anybody else," he says. "So, if Sammy does have a problem with me, I'm fine with that. There's a lot of animals here for me to love and take care of."

Matejek, 36, likens the experience to a moment of truth. She's a willowy, soft-spoken blonde who doesn't look like someone who would take on a tiger. But many volunteers admit that working with these animals teaches you something about yourself. "That was one moment that I absolutely knew who I was," she says. "Your mind is screaming, but you're reacting the way you're supposed to. Now I know what I'm made of. It's enlightening, in a weird way."

As bulldozers dig moats that will encircle the first tiger habitats, Kraft watches his dream take shape. He appraises this landscape from the animals' viewpoint. "I'm building tiger habitats here. If somebody can't see the tigers, that's too bad," he says.

But Kraft is still part showman. He has drawn up plans for ecological zones, with preserves close to native habitats for Siberian tigers, African lions, South American jaguars, bearcats from India, North American wolves and cougars, and many other species. He wants to build additional gift shops and restaurants reflecting the crafts and cuisines of these varied cultures. He envisions "snore and roar" condos, where visitors can spend a night listening to the calls of the wild.

There's a stack of 200 letters on his desk from people who want him to adopt their exotic animals. Kraft is already negotiating to get more land adjacent to his acreage. Donations have come a long way since that first hundred dollars from Caesar's Palace, to amounts in the hundreds of thousands. Kraft insists it all goes to the animals and that he pays himself only $250 a week. "That's all I need," he says. "I've never been this broke, but I'm happier than I've ever been."

Keepers of the Wild will be a true sanctuary, he promises, a place where the animals can live out their lives in the dignity they deserve. "We have so many animals with such sad stories," says Scott Burns. "That's why this place exists." Recent news accounts of the shooting of four "escaped" or abandoned lions in a backwoods hamlet in Arkansas are only the latest in a long litany of animal horror stories. The owner of a fly-by-night, partially fenced exotic-animal farm had moved his operation into that county because it required no permits or inspections. The lions, he has insisted, weren't from his place. A nameless stranger, the park owner claims, turned the animals loose after he refused to take them. Neighbors doubt this version, but say they shot the "starved down" lions to protect their children. This small tragedy points to a larger one: the fact that, in this country, an estimated 6,000 tigers are kept as pets—as many or more than now remain in the wild. In addition, zoos are breeding and selling big cats and other predators to dealers in an almost unregulated market. Many of these animals end up in "canned hunts" on so-called safari parks, where hunters pay thousands of dollars to shoot a tiger or a lion at close range.

"It's disgusting," says Kraft of the killing parks. He wants his Keepers of the Wild sanctuary to educate every visitor to respect wild animals and their environments as well. "Why own one?" he challenges a crowd, as a Siberian tiger springs at the fence and the tourists fall back. "If you think you want a pet, go to the pound: get a dog or a cat. Do not get a cougar. That's a macho thing. If you want to admire these animals, go to India, go to Africa. Or to a zoo or a sanctuary where you can enjoy them once or twice a week, and you don't have responsibility for them. Then you're no longer adding to the problem, you're becoming part of the solution." ○

Before he was rescued from an exotic-animal auction in California, Bengali, an 18-month-old tiger, was permanently caged. Now, says Kraft, "he can take baths and romp."

"Dayton is the place to be in 2003."

John Glenn
Secretary General,
Inventing Flight

July 4 - 6
See over 100 balloons
at The RE/MAX®
Balloon Celebration

July 4 - 20
Time Flies – A Living
History Experience at
Dayton Aviation Heritage
National Historical Park Sites

July 4 - 20
Explore the past and future
at Celebration Central,
with entertainment
for the whole family

July 17 - 20
See three military jet
demonstration teams at
the Vectren Dayton Air Show
presented by Kroger

Glimpse the future
of aviation technology
from Lockheed Martin

July 11 - 13
Honor the Tuskegee
Airmen at the Dayton
Black Cultural Festival

July 18 - 19
"Pioneers of Flight"
National Aviation
Hall of Fame Reunion

July 11 - 13
International
Blimp Meet

A century of flight. Invented here.

Celebrate the history making achievement of the Wright Brothers,℠ and 100 years of flight, by visiting Inventing Flight: Dayton 2003… a spectacular, event-filled celebration of innovation. July 3 - 20 in Dayton, Ohio… the birthplace of aviation.

For tickets call **1-888-FLY-2003**, for visitor information call **1-866-FLY-STAY**, or visit **www.inventingflight.com**.

INVENTING
FLIGHT
DAYTON 2003
THE CENTENNIAL CELEBRATION

THE WRIGHT BROTHERS and other marks TM and © by The Wright Family Fund, Represented by The Roger Richman Agency, Inc.,www.wrightbrothers2003.com

Ohio So much to Discover!

Mischief Maker

A new exhibit showcases the neglected, playful sculptures of artist Joan Miró

BY STANLEY MEISLER

BY THE TIME HE REACHED HIS 70S, Joan Miró had become—with Pablo Picasso and Henri Matisse—a pillar of modern art whose paintings graced the walls of modern museums. But he was also a contemporary artist who never stopped innovating. A small man with thin white hair and the palest of gray eyes, Miró dressed like a salesman, but his bourgeois demeanor hid a penchant for artistic shock. In his celebrated 1923-24 painting *The Hunter (Catalan Landscape)*, for example, the hunter is a stick figure with whiskers, upturned mustache and flaming pipe. After a blink or two of surprise, an observer notices that the hunter is urinating on the ground.

When I interviewed him on his 85th birthday in 1978 on the Spanish island of Majorca, his studio was strewn with unfinished paintings strikingly different from anything he'd done before. The new work was filled with reds, yellows, blues and greens. But despite the exhilarating colors, his women were all grotesque. When I asked him why he made his women look so ugly, Miró clicked his tongue and punched the air. "Evil," he said, referring to himself with a mischievous grin.

Though he led an ostensibly sedate life, dynamic currents obviously coursed through him. "I live like a normal citizen," he told me. "But there is a Catalan saying that the procession marches inside you. What happens is inside." He chuckled impishly and waved an open hand near his chest. "Inside," he said. "Whew!"

Like his older friend Picasso, Miró, who was born in Barcelona

"Everything can be useful," Miró (above right in 1947) said of his use of ordinary objects in his work. A tortoise shell or toilet seat, as in *La caresse d'un oiseau* (*Caress of a Bird*), left, could "produce the shock of one reality against another." Studies record his design process. Opposite: *Oiseau sur un rocher* (*Bird on a Rock*), 1971.

MARK GULEZIAN; HENRI CARTIER-BRESSON / MAGNUM PHOTOS; FUNDACIO JOAN MIRO, BARCELONA; P. 100: LUCIEN CAPEHEART STUDIOS / MILES AND SHIRLEY FITERMAN COLLECTION

"My art is for the people—it is for everybody," Miró (above, with wife Pilar) said in 1981. The public sculpture he planned at various times for three American cities (below) was never realized at its intended monumental scale.

in 1893, left Spain as a young man to join the group of writers and artists who made Paris the center of the western cultural world in the early 20th century. In addition to Picasso, the circle included Ernest Hemingway and Salvador Dalí, and French writers Louis Aragon and André Breton. For a number of years in the 1930s, Miró associated with Breton's Surrealist movement, and his paintings brimmed with symbols such as whirling stars, cat whiskers, barking dogs and monstrous feet.

Living alone in Paris in the '20s, Miró sometimes boxed with Hemingway at an American club. "It was rather comical, since I didn't come up any higher than his belly button," he told biographer Jacques Dupin in 1977. Though desperately poor, he cut a dashing figure. "Every time I went out I wore a monocle and white spats."

He married Pilar Juncosa, the daughter of family friends from the island of Majorca, in 1929, calling her "the most beautiful and sweetest bride in the world." They had one child, a daughter, Maria Dolores, and the couple lived together until his death in 1983 at the age of 90. Pilar died in 1995; Maria Dolores still lives in Majorca.

The Spanish Civil War and World War II induced a deep pessimism in Miró. His spirits lifted after the wars, when he was living in Majorca, his mother's original home. In 1956 the architect Josep Lluís Sert, a close friend, designed a spacious studio for him there, and Miró started turning out the exuberant and brilliantly colored paintings and sculptures of his later years.

Since Miró's death, his later work has been rather neglected, especially in the United States. "After he died," says Laura Coyle, curator of European Art at the Corcoran Gallery of Art in Washington, "art historians and curators took over, and they cared only about his early work." Coyle wanted to redress the imbalance by organizing, with William Jeffett, curator of exhibitions at the Salvador Dalí Museum in St. Petersburg, Florida, a rare exhibition of the whimsical, sly, brightly painted sculptures of Miró's later years. "We looked for four years and could not find a single painted sculpture by Miró in a public American museum," she says.

Having completed its run at the Corcoran, the show, "The Shape of Color: Joan Miró's Painted Sculpture," is at the Dalí museum through May 4. Though it comprises only a dozen sculptures and a pair of models for his monumental structures, it is amplified by photographs and drawings from Miró's notebooks. Some visitors may feel hoodwinked; Miró's sketches for sculptures look deceptively like doodles, and the finished pieces look as if Miró had collected a bunch of odd objects, glued them together, then painted them in bright colors. In fact, Miró loved to collect junk and odd-shaped stones for his sculptures. But as his lifelong friend Joan Prats, a Barcelona publisher and art collector, once noted, "When I pick up a stone, it's a stone; when Miró picks up a stone, it's a Miró." And while the wonderful colors cloak the sculptures in airy lightness, heavy bronze lies beneath.

Miró would assemble objects on the floor, without gluing them together, and photograph them. (He would sometimes alter the images on the photo with a ballpoint pen.) Then he'd take the objects to a foundry for casting into a bronze sculpture, using the photos and drawings as guides. Most sculptors revel in the patina and solidity of bronze, especially for use in monuments and memorials, and Miró made several such bronzes earlier in his career. But in 1967, he began painting his new bronzes.

Though he usually did the painting himself, in 1971 he sent several unpainted bronze sculptures to the Walker Art Center in Minneapolis along with several cans of paint and explicit instructions on

CECIL BEATON / VOGUE, CONDÉ NAST PUBLICATIONS, INC.; MARK GULEZIAN

Frequent contributor STANLEY MEISLER *is profiled in Editor's Note, p. 15.*

Wine Country

I'M AT VINEYARD VALHALLA.

BLISS CENTRAL.

I'M A

seaweed-wrapped,

sun-splashed,

re-relaxed,

CONNOISSEUR OF THE CRUSH

Toast life. Toast a sunset. Heck, toast everything. This Is Wine Country. For a free vacation guide call 1800 GO-CALIF. Then go to visitcalifornia.com or call your travel agent for more information and reservations.

California

FIND YOURSELF HERE™

how to apply it. Dean Swanson, the museum curator, did not touch brush to paint until he received written confirmation from Pierre Matisse, Miró's American agent, that it was all right to do so. (Once they got the go-ahead, the Walker staff reveled in completing the work and took pictures of one another painting the pieces.)

Why would Miró cast something in costly, heavy bronze if he intended to paint it? It makes no sense. But that may be the point. "It's quite a joke to find out that there is bronze underneath," says Coyle. Jeffett agrees. "It's slightly subversive of our traditional way of looking at bronze, which is generally associated with memorials to dead people," he says. "He is trying to give bronze another dimension, a very lively one. He is trying to show it is not a dead medium."

Or, as Miró, then 81, told Alexander Calder in 1974, "I am an established painter but a young sculptor."

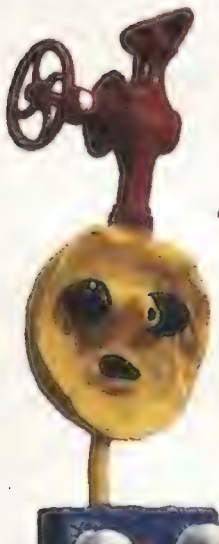
Some of the fun of these sculptures comes from their parts. Take the ten-foot-high *La caresse d'un oiseau* (*Caress of a Bird*), the tallest painted bronze in the show and one of the most delightful. Miró created a figure of a woman made up mainly of a donkey's straw hat (with holes for the animal's ears), a toilet seat from a farm outhouse, and an ironing board; two soccer balls define her buttocks. Miró, whose sketches note that he wanted the woman "decorated in violent colors," painted her yellow, red and green. A blue bird, cast from a stone and a crescent, sits on her head. Judging by Miró's notebooks, he had the ironing board and toilet seat in mind long before he went to work on the sculpture.

In the 1970s Miró started preparing models for monumental multicolored sculptures 50 feet or more high, represented in the exhibition by models and photographs. Several such projects were realized—*Femme et oiseau (Woman and Bird)* in Barcelona, *Couple d'amoureux aux jeux de fleurs d'amandier (Lovers Playing among the Almond Flowers)* in Paris, and *Personnage et oiseaux (Figure and Birds)* in Houston—but his plans for a grand structure in three other cities in the United States were thwarted.

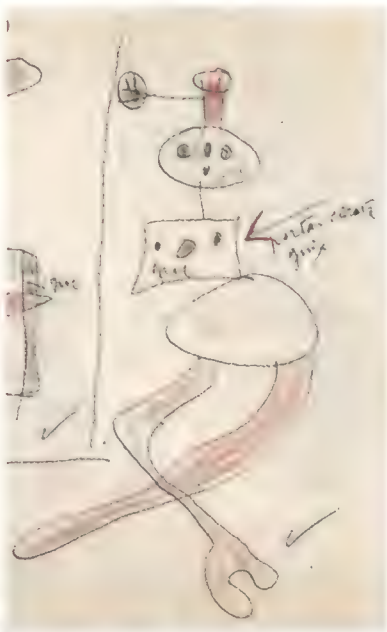
From 1971 to 1979, he negotiated with the Los Angeles County Museum of Art, the city of New York and the Smithsonian Institution's Hirshhorn Museum and Sculpture Garden for a monumental sculpture of an abstracted naked woman (see model, p. 102). New York wanted the sculpture for either Central Park or Carl Schurz Park, near the East River. There was a good deal of discussion about material (Miró at first proposed fiberglass and then shifted to more expensive bronze), but in the end, all three cities rejected the project, most likely because of cost, though there is lingering suspicion Miró's woman might have been too raw for American tastes at the time.

Miró did succeed in 1981 in winning a commission for a less controversial large sculpture. His *Personnage et oiseaux* (*Figure and Birds*), a 50-foot abstract naked woman made of steel and bronze, was placed in front of architect I. M. Pei's Chase Tower in downtown Houston. Miró was too ill to attend the unveiling in 1982. But it was a high society event in Houston with a guest list that included former president Gerald Ford and his wife, Betty, as well as Pei, who told the press: "It was Miró's mischievous aspect that appealed to me. His work is a celebration of life."

On the whole, Americans embraced Miró, and he returned their affection. "America has influenced me greatly because of the vitality you have," he told me. "It has push," he added, punching his fist in the air. "From the moment his work reached American shores until the day he died nearly six decades later," Coyle notes in the catalog, "Miró consistently enjoyed more success—sales, exhibitions, favorable reviews, admiration, and emulation—in the United States, and especially in New York City, than anywhere else in the world." Now, a little-known aspect of his work—his whimsically painted sculptures—make us smile and applaud his impish sense of humor once again.



In sculptures like *Jeune fille s'evadant* (*Girl Escaping*), 1968, left, and *Personnage et oiseaux* (*Figure and Birds*), 1982, above, Miró sought a "phantasmagoric world of living monsters."



ERIK M. STOLZ; MARK GULEZIAN; FUNDACIÓ JOAN MIRÓ, BARCELONA

LEWIS AND CLARK SLEPT HERE.

YOU CAN STILL USE THEIR ROOM.

You can play with their toys too.
For a free Travel Guide:

1 800 VISIT ID
www.visitid.org

Great potatoes.
Tasty destinations.

IDAHO

www.visitid.org

WINTER PALACE

The first major exhibition devoted to the Incas' fabled cold-weather retreat highlights Machu Picchu's secrets

BY FERGUS M. BORDEWICH

PHOTOGRAPHS BY JEFFREY AARONSON

ALTHOUGH I HAD SEEN many images of Machu Picchu, nothing prepared me for the real thing. Stretching along the crest of a narrow ridge lay the mesmerizing embodiment of the Inca Empire, a civilization brought to an abrupt and bloody end by the Spanish conquest of the 1500s. On either side of the ruins, sheer mountainsides drop away to the foaming waters of the Urubamba River more than a thousand feet below. Surrounding the site, the Andes rise in a stupendous natural amphitheater, cloud-shrouded, jagged and streaked with snow, as if the entire landscape had exploded. It is hard to believe that human beings had built such a place.

It was more difficult still to grasp that Machu Picchu remained unknown to the outside world until the 20th century. It was only in 1911 that a lanky, Hawaii-born professor of Latin American history at Yale named Hiram Bingham—with two friends, several mules and a Peruvian guide—set out through the Andes, hoping to find clues to the fate of the Incas. The defeated remnants of that warrior race had retreated from the conquistadors in the direction of the Amazon basin. Bingham had been warned (with some exaggeration) that he was entering a region inhabited by "savage Indians" armed with poison arrows. Instead, he stumbled across the most extraordinary archaeological find of the century. The name Machu Picchu, or Old Mountain, comes from the Quechua Indian term for the 9,060-foot peak looming over the site.

Now many of the items that Bingham collected there nearly a century ago—including richly embellished pottery vessels, copper and bronze jewelry, intricately carved knives unseen except by scholars for more than eight decades—are on view in the first major exhibition devoted to the Inca site ever mounted in the United States. "Machu Picchu: Unveiling the Mystery of the Incas" remains at Yale University's Peabody Museum of Natural History, in New Haven, Connecticut, through May 4, before traveling the next month to Los Angeles, then on to Pittsburgh, Denver, Houston and Chicago.

"The exhibition will change the way people see Machu Picchu," says archaeologist Richard Burger who, in collaboration with archaeologist Lucy Salazar, curated the show. "We're going to break through the myths," he adds. "The exhibition will remove Machu Picchu from the 'world's-most-mysterious-places' category and show us the humanity of the Incas, the rhythms of daily life for both the elite and the common folks."

The site's spectacular setting, the drama of its discovery and Bingham's melodramatic speculations regarding the Incas' fate have all contributed to the legend of a mysterious "lost city." For nearly a century, travelers and dreamers have elaborated exotic theories about its genesis, beginning with Bingham's assertion that Machu Picchu was home to a cult of vestal virgins, who "found [there] a refuge from the animosity and lust of the conquistadors."

Although Bingham never encountered any poison-arrow-toting natives, his explorations were not without their hair-raising moments. In the early summer of 1911, tracing "a trail which not even a dog could follow unassisted," his small party hacked its way through dense tropical jungle and along slippery cliffs. A single misstep could have pitched them hundreds of feet to their deaths. After weeks of arduous trekking, they encountered a peasant who informed Bingham that some ruins might be found on a nearby mountain. "When asked just where the ruins were, he pointed straight up," Bingham later wrote. "No one supposed that they could be particularly interesting. And no one cared to go with me."

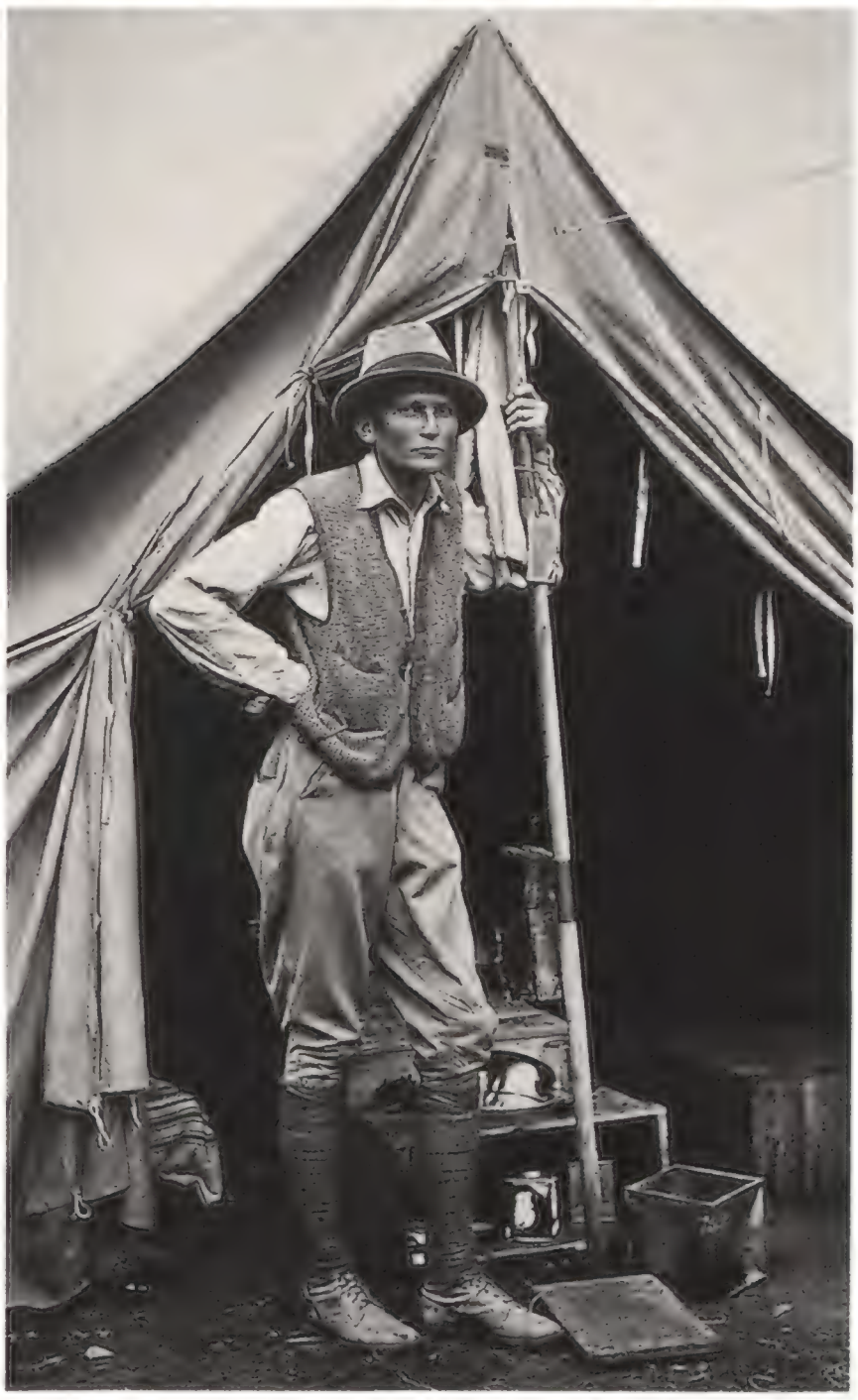
Peruvian archaeologist Alfredo Valencia Zegarra believes the site reflects a magnificently coherent vision: "Machu Picchu was a unity—everything had its intended place."

On July 24, after crossing the Urubamba on a rickety bridge, crawling on his hands and knees "six inches at a time," he struggled up a snake-infested mountainside through nearly impenetrable thickets. "Suddenly," he would recall, "I found myself confronted with the walls of ruined houses built of the finest quality of Inca stone work.... It fairly took my breath away. What could this place be?"

AS WITH MOST modern visitors, I traveled to Machu Picchu by train from Cuzco, the old Inca capital less than 70 miles away, though it took nearly four hours to reach Aguas Calientes (Hot Waters), the village nearest to Machu Picchu, named for the thermal baths located there. My companion, Alfredo Valencia Zegarra, one of Peru's most eminent archaeologists, had begun digging at Machu Picchu in the 1960s. The train chugged across a landscape of somnolent villages, and narrow, terraced valleys where farmers, in the tradition of their Inca ancestors, tilled the ancient Andean crops, maize and potatoes. As we descended—Machu Picchu, nearly 3,000 feet lower than Cuzco, lies on the eastern edge of the Andes—the vegetation grew denser, the valleys more claustrophobic. Stone cliffs towered hundreds of feet overhead. Alongside the

---

FERGUS M. BORDEWICH reported recently for SMITHSONIAN on the history of New York City's 19th-century street gangs. Photographer JEFFREY AARONSON is based in Aspen, Colorado.



In 1911, when Hiram Bingham (at the site, left) discovered and photographed ruins in the Andes (see map), Machu Picchu lay under jungle growth. Even so, Bingham knew he had stumbled upon the "rugged masonry of a bygone race."

HIRAM BINGHAM, YALE PEABODY MUSEUM / NATIONAL GEOGRAPHIC SOCIETY IMAGE COLLECTION (2); MIKE REAGAN

tracks, the Urubamba surged over boulders and beneath treacherous-looking footbridges anchored on stone abutments that date from Inca times.

From Aguas Calientes, an unpaved road twisted up the mountain to Machu Picchu itself, where we at last came upon the vision that left Hiram Bingham speechless 92 years ago. When he first explored here, the jungle had almost entirely engulfed the ruins. Since then, the overgrowth has been hacked away, making it easy to discern the plan the Incas followed in laying out the community. Two more or less distinct quadrants lie separated by a series of small grassy plazas. "The Inca envisioned all things in duality: male and female, life and death, right and left, the upper world and the lower world," said Valencia, a stocky, amiable man of 62, as he bounded over ruined walls and craggy trails that would have challenged the equilibrium of a llama. "One can distinguish here an urban sector and an agricultural sector, as well as the upper town and the lower town. The temples are part of the upper town, the warehouses the lower, and so on."

The Incas were just one of a host of minor tribes until the early 15th century. Then, gripped by a messianic belief that they were destined to rule the world, they began conquering and assimilating their neighbors. The Incas had a genius for strategy and engineering: they pioneered methods of moving large armies via road networks they constructed through the Andes. By the 16th century, their reach extended almost 2,500 miles, from present-day Colombia to central Chile.

According to Richard Burger, Machu Picchu was probably established between 1450 and 1470 by the Inca emperor Pachacuti as a royal preserve, a sort of Inca Camp David. Here, members of the royal family relaxed, hunted, and entertained foreign dignitaries. Other scholars, including Valencia, believe that Machu Picchu may have served also as a district center for administering recently conquered lands on the eastern slope of the Andes. In either case, Valencia says, the site was situated at the nexus of important Inca trails, connecting the highlands and the jungle, in a region rich in gold, silver, coca and fruits.

Apart from a few tourists, and llamas roaming at will through the ruins, their soft, melancholy faces peering at us over the ancient walls, Valencia and I wandered alone. We made our way along narrow cobbled lanes, through the roofless shells of temples, workshops, storehouses and houses where the grandees of the Inca world once dwelled. Hundreds of stone terraces descended the slopes. Ruins seemed to bloom out of the blue-granite boulders that littered the landscape. In many cases, laborers had chiseled these huge rocks in place to form temple walls, stairs, altars and other architectural elements.

At the height of Pachacuti's reign, most of these buildings' interior walls would probably have been covered in yellow or red plaster. The temples may well have been lavishly painted with the cryptic figures that survive today in the patterns of this region's exquisite woven fabrics. And of course, five centuries ago, crowds, garbed in distinctive regional dress, including elaborate garments made of alpaca and

Today the site offers visitors (whether approaching the remains of a guardhouse, below, or traversing staircases, right) an extraordinary foray into the past. On a recent journey, travel writer Hugh Thomson found "a city almost casually draped over the shoulder of a mountain ridge."

vicuña and dyed in brilliant colors, would have thronged the streets. (According to Yale's Lucy Salazar, the Inca Empire was multiethnic. The inhabitants of Machu Picchu constituted a microcosm of that world. "We have found the remains of individuals from as far away as Ecuador, Lake Titicaca and the Pacific coast, as well as the Andean highlands.")

IN THE EMPIRE'S HEYDAY, Machu Picchu teemed with life. On any given day, stonecutters chiseled walls for new buildings, and metalworkers hammered jewelry for the imperial treasury. Caravans of llamas arrived, laden with supplies from distant regions, while local farmers, bent beneath loads of maize and potatoes, carried their harvest into the city. Byways bustled with royal couriers and soldiers. Envoys of the emperor, borne on litters, were preceded by royal retainers, who swept paths before their masters.

Spanish-colonial chronicles describe day-to-day existence for the imperial entourage. The emperor and his nobles often banqueted in ritual plazas—with mummies of their ancestors beside them, in accordance with tradition, which held that the dead remained among the living. Dozens of *acllas,* or chosen women, prepared and served platters of roast alpaca, venison and guinea pig, to be washed down by *chicha*, or fermented maize. It was these young maidens who gave rise to the legend, promoted by Bingham, that Machu Picchu was home to a cult of "Virgins of the Sun."

At the luminous heart of this activity, of course, was the emperor himself, whom the Incas believed to be the physical offspring of their most powerful deity, the sun. Pachacuti (He Who Shakes the Earth), who reigned from 1438 to 1471, is regarded as the greatest Inca ruler, credited with creating an administrative system essential to maintaining an empire.

Pachacuti's residence is only a shell today, but it nevertheless manages to suggest the luxury that royalty enjoyed in an age when ordinary citizens lived in windowless, one-room huts. Spacious even by modern standards, the royal quarters housed interior courtyards, rooms of state, private bathrooms and a separate kitchen. (So sacred was the emperor's person, reported the Spanish, that attendant acllas burned garments after he wore them, lest anything that touched his body be contaminated by contact with lesser mortals.)

And yet Machu Picchu was not, in any modern sense, a city. There were no factories, shops or markets. Indeed, there was likely no commerce at all: the emperor, who laid claim to everything produced within his realm, redistributed food and clothing among his subjects as he deemed fit. While defense may have played a role in the selection of Machu Picchu's site—the region had only recently been subdued, and enemies, the wild tribes of the Amazon basin, lived only a few days' march away—the ritual-obsessed Incas must also have designed it with the sacred in mind.

To the Incas, the mountains were alive with gods that had to be placated with ongoing offerings of maize, chicha or meat. Occasionally, in times of famine or disaster, human beings were sacrificed. The most sacred site within Machu Pic-

More than 400 artifacts, including many Bingham collected at the site, make up the first major exhibition devoted to Machu Picchu. Among the finds: a shawl pin (left) carved in bone and adorned with dual images of birds; a silver headdress ornament (below); an array of fan-shaped silver shawl fasteners (bottom), essentials in a culture where buttons were unknown.

ALL: PEABODY MUSEUM

Bingham unearthed a stone box (above) embellished with geometric motifs; it was likely intended for use in rituals and perhaps contained ceremonial objects. The ceramic jar (below) would have stored *chicha*, or corn beer.

Everyday objects, artfully crafted, include (from top) a ceramic jar, fitted with a large handle and used for pouring chicha; another serving vessel, playfully executed, molded in the form of a hand proffering a drinking cup. The bronze pendant, ornamented with spirals, represents a stylized knife blade; this piece of jewelry may indicate the work of artisans from as far away as Ecuador, reflecting the multiethnic population that inhabited Machu Picchu.

chu was the Intihuatana (Hitching Post of the Sun), a massive stone platform located at the highest point of the city. At the center of this great terrace lay a revered sculpture, a stylized mountain peak chiseled from a block of granite that may have served as a kind of calendar. "The Intihuatana was a device to control time, a sort of spiritual machine," Valencia says, standing on the lofty platform. "If I were an Inca priest, I would be carefully watching how the sun moved month by month, studying its relation to the mountains. In effect, I would be reading the calendar, determining when crops should be planted, harvested and so on."

Archaeologists place the population of Machu Picchu at somewhere between 500 and 750, more in winter when the imperial entourage came to the lower altitude retreat to escape the chill of Cuzco. (Farmers who raised food for the settlement probably lived nearby. Cuzco's population was between 80,000 and 100,000; the total population of Peru was perhaps eight million.) Though Bingham speculated that Machu Picchu took centuries to build, current thinking has it completed in 20 to 50 years—lightning speed by preindustrial standards. The explanation, says Valencia, lies with the "limitless labor available to an Inca ruler."

The Incas apparently continued to occupy Machu Picchu, at least for a short time, after the Spanish conquest. Archaeologists have found the remains of horses, which were introduced into Peru by the conquistadors, as well as a few Spanish-made trinkets, probably brought to Machu Picchu by travelers from the capital. New construction seems to have been under way when the settlement was abandoned. But why did everyone disappear? And where did they go?

Machu Picchu was made possible only by the fabulous wealth of the imperial elite. When the Spaniards decimated the ruling class, in the 1530s, survivors would likely have fled into hiding. Some may have moved to new lowland towns that the Spanish founded. Others probably returned to homes in other parts of Peru. Once Machu Picchu was abandoned, it virtually disappeared. The only evidence that the Spanish even knew about it are brief references in two colonial documents. Wrote one Spanish official: "This night I slept at the foot of a snowcapped mountain . . . where there had been a bridge from ancient times that crossed the River Vitcos to go to . . . Pichu."

By the 1570s, the Spanish conquest of Peru was more or less complete. The old Inca world gradually slipped away. Sacred shrines were razed or converted to churches, ritual plazas turned into market squares. Harsh punishment was meted out to those who persisted in the old beliefs and practices. Still, the Inca legends survived, molded into the shapes of ceramics, woven into the patterns of textiles.

And nostalgia for Inca times still infuses Peruvian culture. Discouraged by their nation's crumbling economy and chaotic politics (President Alberto Fujimori, accused of corruption, fled to Japan in November 2000), many Peruvians idealize Inca rule as a kind of Camelot. To this day, amid Machu Picchu's ruins, villagers make offerings of coca leaves, cigarettes, liquor and cookies, gifts of prayer to the gods of the mountains. Or perhaps to the invisible Incas themselves,

When Hiram Bingham came upon a ruin he called the Temple of the Three Windows, the explorer found it to be "beautifully made with the greatest care and solidity." The structure, he declared, "was clearly a ceremonial edifice."

In the highland city of Cuzco (where a young resident's attire reflects ancient traditions), centuries-old Inca masonry is visible everywhere. An earthquake in 1950 toppled many Spanish colonial structures, revealing sturdy foundations and walls erected by the master stoneworkers of a lost empire.

who Peruvians believe will someday return in all their glory.

And what of Hiram Bingham? He returned to Machu Picchu twice during the 1910s to conduct field research, eventually shipping hundreds of artifacts home to the Peabody Museum at Yale. He reluctantly ended his work in the region in 1915, only when he was accused by Peruvians— unjustly, as it turns out—of stealing tons of gold. (In fact, what gold there might once have been at Machu Picchu had probably been removed to buy the freedom of the last real Inca emperor, Atahuallpa. He was taken prisoner by the Spaniards, only to be executed in spite of the fabulous ransom the Incas had collected by stripping sites across Peru.) Bingham became lieutenant governor of Connecticut in 1922 and a U.S. senator in 1924. To his last days he remained convinced, wrongly, that he had discovered both the legendary birthplace of the Incas and their secret capital, Vilcabamba, where legends say they hid from the Spanish for years after the conquest.

One morning, Valencia and I climbed Huayna Picchu (Young Mountain), the peak that towers 600 feet over Machu Picchu. From our starting point, it was impossible to discern the switchback path that levered itself up a narrow cleft in the cliff face, through clumps of orchids, yellow-flowering yucca and spiny shrubs. At times, the trail, cut from stone, seemed more like a ladder than ascending stairs, each rung no broader than the width of my foot. At the summit lay the ruins of several Inca structures, at least one a temple.

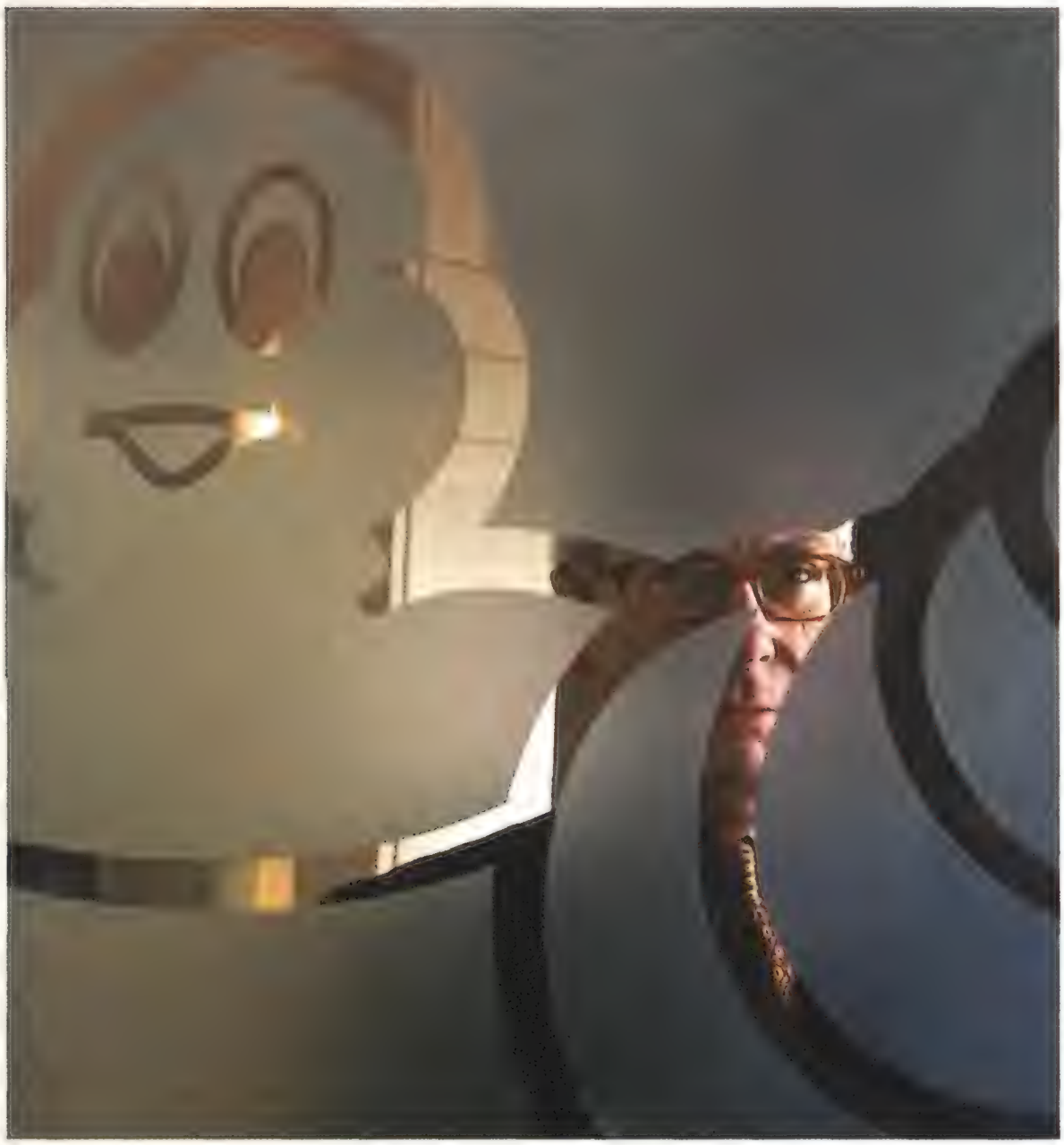
From the peak's wind-whipped crest, the traces of old Inca trails were visible, disappearing down into the jungle. Valencia said more ruins lay hidden below, among the trees, unexplored, unmapped. "There are still mysteries here," he said. "There is more to discover, much more." ○

GETTING THERE

American Airlines flies from Miami to Lima, where connecting flights to Cuzco leave daily. Start with the official Peruvian tourism office at www.peru.org.pe.
A good read is Hugh Thomson's *The White Rock: An Exploration of the Inca Heartland.*
INSIDE TIP: Stay at Cuzco's 5-star Hotel Monasterio, a lovingly restored 17th-century colonial seminary located in the heart of the old city. Prices range from $290 to $335 per night.
CHOICE COLLECTIBLE: Extraordinarily beautiful textiles with centuries-old Inca designs are abundant in Cuzco. Prices are reasonable, and bargaining is expected.
FOR THE GOURMET: The Incas were connoisseurs of *cuy*, or roast guinea pig. It is available at restaurants in Cuzco and Aguas Calientes.
YOU SHOULD KNOW: You can't ride a llama to Machu Picchu on the 26-mile Inca Trail; the animals can carry only about 100 pounds. (You can also reach the ruins by train or helicopter.) Still, if you choose to trek with one of these surefooted "Ships of the Andes," the beast will happily carry your duffel.

Fare-Minded Arbiter

Quelle surprise! *Englishman Derek Brown presides over France's prestigious Michelin guide to haute cuisine* ~ BY RUDY CHELMINSKI



Michelin Red Guide director Derek Brown (behind the Michelin man) declines to "give away the state secrets" about how the coveted stars are awarded to restaurants.

He usually worked alone, eating, paying his bill and continuing quietly on to his next stop. But like Superman disguised behind Clark Kent's eyeglasses, Inspector Brown had a trick up his sleeve: the power to confer a Michelin guide star or two or perhaps even three.

TO MEET WITH Derek Brown, you must first pass a checkpoint at the main gate of a chic 1930s-style office building on the avenue de Breteuil in Paris. From there, you walk through a tropical garden into the reception area, where your passport or *carte d'identité* is confiscated. Then you clip on your visitor's tag and wait. Derek Brown may not be the *Président de la République,* but the prestige he enjoys is not far removed, for he is the editor of *Le Guide Rouge Michelin*, the illustrious hotel and restaurant directory that is France's—make that the world's—bible of gastronomic excellence.

Brown, 58, is an Englishman. A little more than two years ago, when Michelin (a company that also makes tires) announced his appointment, Gallic eyebrows shot up. The very idea of a *Britannique* as the arbiter of French cooking was shocking. But the following March, when the guide made its annual appearance, there was no mention of boiled beef at the Tour d'Argent nor toad in the hole at the Ritz. *Le Michelin* was still *le Michelin*, which is to say as French as ever.

It is difficult to overstate the importance of this fat, symbol-filled book with its bright red cover. The secrecy of its procedures, the integrity of its inspectors and the dour reserve of its editors make it one of the rare institutions to which the French willingly accord their full confidence. For more than 100 years now, the so-called Red Guide has been a reassuring constant in an ever-changing world. A cartoon in a Paris newspaper in the mid-1960s nicely summed up Michelin's unassailable reputation. It depicted France's sensationally high-handed president, Charles

PAUL COOPER

de Gaulle, addressing Bibendum, the famous Michelin man made of tires. "*Alors*, Bibendum," de Gaulle is saying, "Who is the guide, you or me?"

Brown learned the Michelin theology many years ago, and he's not about to rock the boat now. He began as a restaurant inspector in 1971 prior to the launching of the guide's British edition three years later. Son of a naval architect and an at-home mother, he went to hotel school in England and then spent four years as a cook and hotel manager before answering an ad and plunging into the venerable rites of the Michelin factotum: restaurant meals twice a day, hotel inspections between them and reports written in the evening.

He usually worked alone, driving a nondescript car, dressing in an average way, blending into the background, eating, paying his bill and continuing quietly on to his next stop. But like Superman disguised behind Clark Kent's nerdy eyeglasses, Inspector Brown had a trick up his sleeve: the power to confer a Michelin guide star or two or perhaps even three, the ultimate accolade, upon the restaurants that pleased his palate. Those stars matter immensely. No establishment whose reputation has been made by the guide wants to see its ratings tumble. Everyone in the trade knows about the French restaurateur who committed suicide upon learning that he had lost his star. But Brown does not remember it that way.

PATRICK KOVARIK / AFP PHOTO

Last year's Red Guide (introduced by Edouard Michelin, left, and Derek Brown) sold more than 500,000 copies.

"It's a fine old story," he says, "but the poor man had been having all sorts of other problems, and it simply wasn't happening on the plate anymore. Life got to be too much for him. It *wasn't* the guide."

Brown sees visiting journalists and other callers in one of the conference rooms in which supplicant chefs are sequestered when they make their annual pilgrimages to avenue de Breteuil to ask how they are doing and, symbolically, kiss the pope's ring. No outsider is permitted in the secret sectors beyond the ground floor and the basement, much less in Brown's office itself. "I was trembling with terror the first time I was led into one of those windowless little rooms," one two-star chef freely admits. Thousands like him know the experience. Brown has a corps of poker-faced assistants whose basilisk gazes can turn the strongest legs to jelly.

Glenfiddich
The independent spirit.
Distilled by an independent family company. Bottled as Glenfiddich, which means "valley of the deer." Matured at its own Highland distillery for a full 15 years — our Solera Reserve features delicious notes of oak, honey, vanilla spice, fruit and sherry.
Glenfiddich
SOLERA RESERVE
GLENFIDDICH.COM
AGED 15 YEARS
2007 Imported By William Grant & Sons Inc. New York, NY 10065 Glenfiddich is a registered trademark of William Grant & Sons Ltd.
All Rights Reserved. Please Drink Responsibly. Enjoy This Whisky Responsibly.

Where Will My Baldwin Take Me?

Ben Folds
pianist, singer,
and composer

Baldwin
www.baldwinpiano.com
1.800.876.2976

You probably wouldn't notice Derek Brown in a crowd, and that's the way he wants it. He is of average height and build and, for a man who has spent his professional life being paid to eat in restaurants, surprisingly trim. His appearance is serious and respectable: conservative gray suit, blue shirt, red-checkered tie, *pochette* folded just so in his breast pocket, understated gold watch. He is soft-spoken. His beautifully manicured hands may indicate a fastidious nature. With his horn-rimmed glasses, clear blue eyes and salt-and-pepper hair, slightly balding at the back, he could fit in anywhere.

Michelin men and women take great pride in not sticking out. "A while ago I ate in a three-star restaurant in Paris," Brown recalls, "and a month or so later the owner asked to come and see me. When I told him I had been there, he was surprised. It must have been when I was away, he said. No, I told him—when you came by the tables to talk with the guests, you spoke with us, and you didn't recognize me."

That triumph of anonymity was all the more satisfying when considered against the legendary alertness that reigns in the trade. No one is as gimlet-eyed as a restaurateur on the lookout for a Michelin representative. The game of spot-the-inspector has been going on ever since the first guide appeared in 1900, and French food folklore is replete with stories of hits and misses. But the hits aren't necessarily to the advantage of the host.

Once when Brown and a colleague were in a restaurant, the manager was having lunch a few tables away. "He called the headwaiter over, and we overheard him say I think those two blokes are from the Michelin guide. From then on the whole thing went mad. One of us was having the dish of the day from a carving trolley, and now back came the trolley. The carving chef said have some more, I've got a fresh one here, and then the wine waiter poured us some wine and spilled two little drops on the tablecloth. Well, instead of covering it up with a napkin—perfectly normal—they took everything off and changed

JOURNEYS OF AMERICAN HISTORY

BIRTH OF OUR NATION
A Patriotic Journey In Early America

THIS HALLOWED GROUND
A Journey Through the Civil War in Virginia and at Gettysburg

HOW THE WEST WAS WON
Lewis and Clark – Custer and Crazy Horse
Great Falls – Yellowstone – Mount Rushmore

WORLD WAR II IN EUROPE
Follow the Greatest Generation, as written by Tom Brokaw, from Normandy to Bastogne to Berlin.

Matterhorn Travel • (800) 638-9150
www.matterhorntravel.com
E-mail: holidays@matterhorntravel.com

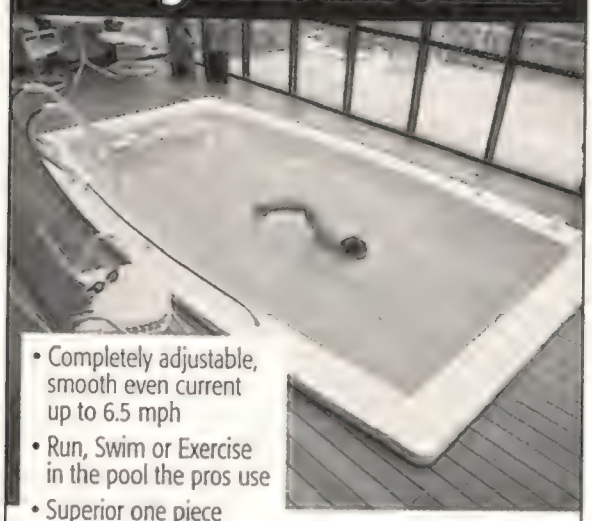
World's Largest Inventory!
China, Crystal, Silver & Collectibles
• *Old & New*
• *125,000 Patterns*
• *6 Million Pieces*
• *Buy & Sell*
Call for **FREE** lists.
REPLACEMENTS, LTD.®
PO Box 26029, Greensboro, NC 27420 Dept. SM
1-800-REPLACE (1-800-737-5223)
www.replacements.com

KILL LAKE WEEDS
Proven **AQUACIDE PELLETS** destroy unwanted underwater weeds.
Before / After
Spread marble sized pellets like grass seed. Effectively kills weeds at any depth
Registered with the Federal Environmental Protection Agency.
Certified and approved for use by state agencies. **10lb. can** treats up to 4,000 sq.ft. of lake bottom, $66.95. **50lb. carton** treats up to 20,000 sq.ft. of lake bottom, $260.00. Prices include delivery charges. Delivery F.O.B. White Bear Lake, MN. State permit may be required.
CALL TOLL FREE 800-328-9350
Call 651-429-6742 • Fax 651-429-0563
Or write for FREE information to:
AQUACIDE CO.
Our 48th year
1627 - 9th Street, **DEPT. 319**, Box 10748,
White Bear Lake, MN 55110-0748
www.killlakeweeds.com • info@killlakeweeds.com

EUROPE $200* ROUNDTRIP
London, Paris $200. Hong Kong $100.
Bangkok $300. Mexico $150.
Caribbean $250. So. America $200.
Hawaii $238. ALL ROUNDTRIP!
1-800-822-0888
Cheaptrips.com
*Subject to availability, membership & departure

New WEATHER STATION
New MK III
-Wireless
-Solar powered
-Made in USA
www.Rainwise.com 1-800-762-5723

Nothing Flows Like SwimEx



- Completely adjustable, smooth even current up to 6.5 mph
- Run, Swim or Exercise in the pool the pros use
- Superior one piece construction
- Easy installation and maintenance
- Prices start at $21,900
  Factory direct prices available in some locations

SwimEx®
Aquatic Therapy, Sports & Conditioning Pools
Call today: 800-877-7946
or visit www.swimex.com

Brown Bears
of Katmai National Park

The world's most accessible location for viewing brown bears. See them in their natural environment at the scenic Brooks River in Katmai, Alaska.

6-day Tour: $2,145
800-368-0077
www.travelwild.com
SM64

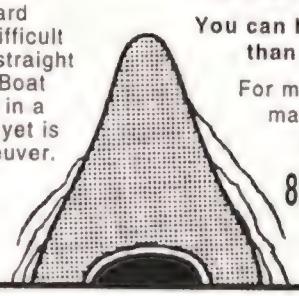
TravelWild EXPEDITIONS

THE POKE BOAT®
IT'S EVERYTHING A CANOE ISN'T.

A canoe is tippy. A Poke Boat isn't. It's remarkably stable.

A canoe is hard to turn and difficult to keep in a straight line. A Poke Boat isn't. It stays in a straight line, yet is easy to maneuver.

A canoe is heavy. A Poke Boat isn't.



It weighs only 22 pounds - built with aircraft strength.

You can buy more than a canoe.

For more information, give us a call.

859-986-2336

TerraCottaWarriors.Com

We sell reproductions of these 2200 year old Chinese statues
Visit our website or 661-298-2296
From small gift sets to life size!!!!

COUNTRY WALKERS
23 years of excellence in worldwide walking vacations
Free Catalog Call 800.464.9255
or contact your local travel agent
www.countrywalkers.com
A Grand Expeditions Company

the whole tablecloth as we were eating. Complete nonsense. We just discounted that visit."

Michelin's award of a star, or even simple inclusion in the guide, can bring a restaurant almost instant prosperity, and Brown is pleased to see more and more stars showing up these days. France, the land of renowned chefs Paul Bocuse, Alain Ducasse and Bernard Loiseau, is still the champion of *la grande cuisine,* with 23 three-star establishments, but 22 other restaurants of the same stature are scattered throughout the ten Red Guides Michelin publishes on other European countries. Fine cooking has become a worldwide passion.

Brown is cagey about rumors that Michelin plans to bring out an American guide. "My experience there hasn't been enormous," he says. "It's mainly New York City. There are some very fine restaurants, but in America people tend to go much more in vogues than in Europe. You can make a small fortune very quickly, but just as quickly you can stop having your customers the day after."

As for fast food, the unknown manager of an unnamed burger-and-fries emporium in Manhattan might be surprised to learn that he or she has had the honor of an anonymous visit by Michelin's inspector in chief. "Yes, I ate a burger," Brown admits. "And drank a Coke. I went specifically to a place in New York to see what it was all about. It wasn't highly sophisticated, gastronomically, but there was nothing wrong with it."

Is there anything this urbane omnivore *doesn't* like? "There are some things I enjoy less [than others]," he allows. "One is beetroot [beets]. And I have to admit I'm not great on cooked carrots. Apart from that, there's not much I won't eat." His protestations notwithstanding, however, there's reason to suspect Brown may be even more particular at home than he is on the job. His wife, Jennie, says he's "fussy." ○

Longtime contributor RUDY CHELMINSKI *lives in France and eats out often.*

China & Yangtze Cruises

See China's imperial treasures and its legendary scenic splendors, including the spectacular Yangtze River Gorges. Choose from our expertly designed deluxe escorted tours, 11 to 21 days. Stay at deluxe hotels and cruise aboard the best ships on the Yangtze, Victoria Cruises. All meals, daily sightseeing and all cruise excursions are included, plus performances and cultural highlights.
From only $1898 incl. airfare.

Tibet, Silk Road Mongolia & Siberia

Journey to the last travel frontiers of the Far East. Visit mystic Tibet. Retrace the steps of Marco Polo along the legendary Silk Road. Explore remote Mongolia and its timeless Gobi Desert. Discover Siberia and its hauntingly beautiful Lake Baikal, one of the world's wonders. Choose from 17 to 19-day deluxe escorted tours at unbeatable value.

See your travel agent
or call 800-645-0793

UNIWORLD
America's Leader for Travel to China & Asia
www.uniworld.com

Merlot Lovers!

Order 6 bottles of our Borie Manoux French Merlot for just **$6.58 each** and receive:

- **FREE** Shipping
- **FREE** Wine Collector's Crate (holds 12 btls.)
- **FREE** Food & Wine Pairing Guide

All for $39.48!
Your purchase of our fine Merlot is 100% guaranteed!

Call toll free:
1-866-546-WINE (9463)
or visit ***www.geerwade.com***

(Enter the wine code [FRA265] in the "Express Shopping" box. Be sure to enter your special offer keycode where it says, "Do you have a promotional keycode?")

GEERLINGS & WADE 960 Turnpike Street Canton, MA 02021

Geerlings & Wade is a licensed retailer.
Limit 1 crate and 1 Food/Wine glide per customer.
Some restrictions apply. Wines not available in all states.
KEYCODE: A3AA117 ©Geerlings & Wade 2003

Once $350...
Now Only $35

The Legendary 1904-O Morgan Silver Dollar, Brilliant Uncirculated

In 1962, the 1904-O (New Orleans Mint) Morgan silver dollar was one of the three costliest rarities in the series, UNC's listing for $350. Then the Treasury released the last sealed bags of pristine 1904-O Morgans. Today no other Brilliant Uncirculated Morgan silver dollar costs so little compared to its peak price. Sells for $52 elsewhere. **Introductory Price: $35. Limit 2. Order #18579. Limited time offer.** Add total of $2 postage. **30-Day No-Risk Home Examination: Money-Back Guarantee. To order by credit card call the toll-free number below.** Or send check or money order to:

International Coins & Currency
62 Ridge Street, Dept. 4334
Montpelier, VT 05602
1-800-451-4463
Order at www.iccoin.net (many more great deals) 4334

Exiting Vietnam

Henry Kissinger's new book revisits America's troubled extrication from Indochina – BY ELIZABETH DREW

DAVID HUME KENNERLY / WHITE HOUSE / TIMEPIX (KENNERLY AND WHITE HOUSE RECORDS DATE THE PHOTO APRIL 29, 1975; KISSINGER SAYS IT WAS TAKEN MAY 14, 1975.)

Kissinger (with National Security Adviser Brent Scowcroft at the White House as Saigon fell, April 29, 1975) says the "essence of the Vietnam tragedy was the tension between America's idealism and the perception we have of ourselves as a nation with a special mission—and our growing involvement in a world of power."

THE VIETNAM WAR was our longest—longer than the Civil War and the two world wars. It rent our society as no other issue had done since the War Between the States, and the wounds it inflicted have yet to completely heal. With its conjoined ordeal, Watergate, it raised distrust of government to new levels. It affects our attitudes toward war to this day; we are still struggling to define our nation's interests abroad.

A less recognized but significant aspect of the Vietnam War is that it was our transitional war: our first war of counterinsurgency, against an enemy in the midst of the very people we were trying to defend and that melted back into the population after striking. A war against both a state (North Vietnam) and an ideological revolution (communism), it frequently involved unorthodox combat. Up against a far weaker opponent—in conventional terms—we learned the limits of tradi-

tional military power; our B-52s did not subdue a tough and determined enemy. Since Vietnam, the concept of power has radically changed.

Now we are engaged in a war against terrorism that takes us even further from prior experiences. We are up against what are termed non-state actors. The enemies, more elusive than even those in Vietnam, are using time and space in new ways—and also highly unconventional weapons. We've embarked on an open-ended war, and we won't know at any particular moment whether we've been victorious.

Some of the misconceptions that America acted on in the Vietnam War are stunning. Successive administrations—those of John F. Kennedy, Lyndon Johnson and Richard Nixon—committed some of the same errors made by the French, Vietnam's former colonial power. The French had maintained protected enclaves, like Dien Bien Phu, which American leaders reinvented as "strategic hamlets." The French had a strategy of *jaunissement* (or "yellowing"), which we reinvented as "Vietnamization"—trying to turn the war over to the local populace. Our leaders' failure to learn from history is a cautionary tale.

The Vietnam War resulted in the deaths of 1.5 million to 3 million Vietnamese and other Indochinese and 58,000 Americans. It was the catalyst for Richard Nixon's self-induced disgrace. And it broke the three other U.S. leaders most associated with it: Johnson; his secretary of defense, Robert McNamara; and, in a way, Henry Kissinger. I say "in a way" because Kissinger went on to sell his name, strategic advice and access to foreign leaders, and because many political figures, businessmen and members of the news media consider him an oracle.

Kissinger's 14th and latest book, *Ending the Vietnam War,* reflects just how tormented he remains over the

---

Washington journalist ELIZABETH DREW *is the author of 14 books, including* Citizen McCain *(2002), about Republican Senator John McCain's campaign reform crusade.*

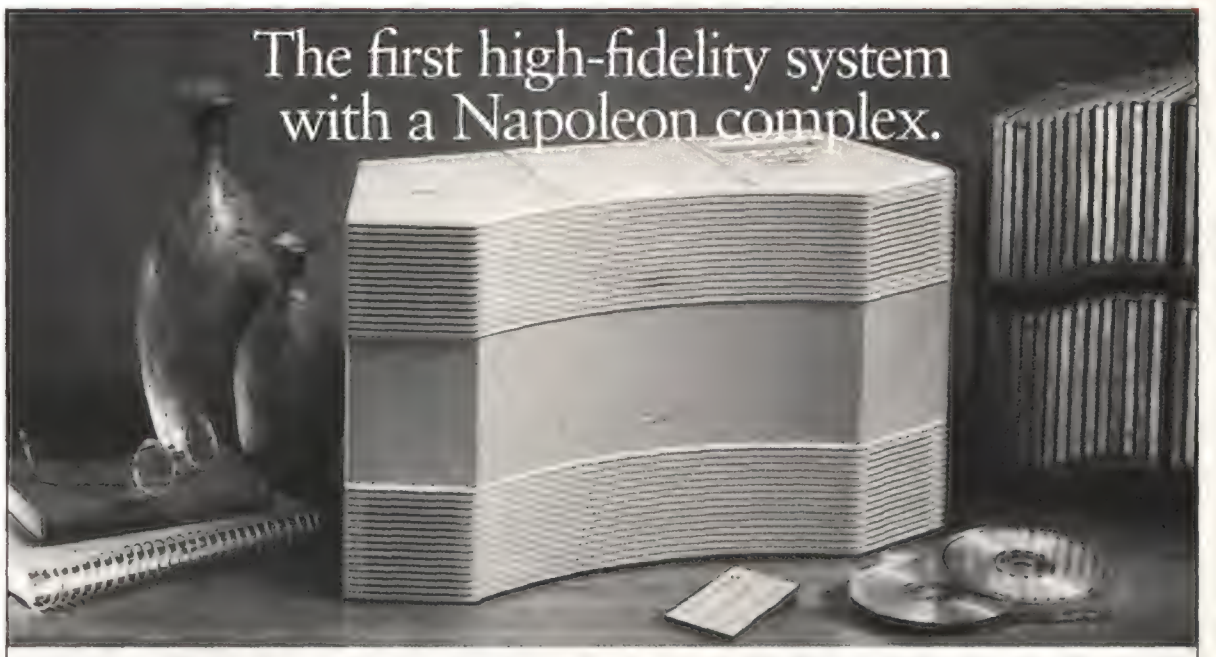
EXPLORE GREAT MUSEUMS THE WAY THEY WERE MEANT TO BE SEEN. FOR FREE.

Charging you to see the major collections at any of our 300 museums and galleries would be a bit like taxation without representation. And we know how you feel about that.

LONDON

CIE TOURS International

For great offers and a free CIE Tour brochure, see your local travel agent or go to visitbritain.com/usa3 or call 1-866-868-1870.



It may be small. But the Bose® Acoustic Wave® music system is definitely an overachiever. The complete system, which is available in Platinum White or Graphite Gray, measures just 10¾"H x 18"W x 7⅜"D yet features a CD player, an AM/FM tuner, built-in speakers, a handy remote control and our patented waveguide speaker technology. And it produces a rich, natural sound quality comparable to audio systems costing thousands of dollars. Call today for more information about our 30-day in-home trial and free shipping offer. Take advantage of our installment plan and make 12 interest-free monthly payments.* Plus, if you order before March 31, 2003 we'll include the accessory of your choice at no charge. Choose our Multimedia Pedestal which easily connects your Acoustic Wave® system to up to four additional audio sources simultaneously. Choose our Power Case and you can take your Acoustic Wave® system almost anywhere. Or select our Power Microphone which makes your Acoustic Wave® system great for public speaking and singing. Only from Bose – the most respected name in sound.

Choose one accessory FREE when you order by March 31, 2003. *A $149.95 value.*

Call 1-800-672-2673, ext. G5798.
For information on all our products: www.bose.com/g5798

BOSE® Better sound through research.

©2003 Bose Corporation. Patent rights issued and/or pending. The Acoustic Wave® music system design is also a trademark of Bose Corporation. *Installment payment plan, free shipping and free accessory offers not to be combined with any other offer or applied to previous purchases. Your credit card will be debited each month with no interest charges from Bose. Credit card rules and interest may apply. Payment plan available on credit card orders only and subject to change without notice.

war and the criticisms of his role in it, first as Nixon's national security adviser and then as Nixon's and Gerald Ford's secretary of state. The book, comprising previously published texts reworked to pull them together, is well worth examining as a thing unto itself.

Ostensibly a history of the Nixon administration's efforts to end the war, the book reads more like Kissinger's case for the defense, and is written with some outrage and not a little self-pity. He takes on the serious charges that have been lodged against his and Nixon's prosecution of the war, saying, "Nothing could be further from the truth." He still wrestles with some decisions—"I have since often anguished," he says of one tactical move—but he doesn't question the basic premises behind his and Nixon's conduct of the war.

Kissinger argues, unpersuasively, against the enduring criticism that the deal in 1973 between the United States and North Vietnam could have been reached as early as 1969, shortly after Nixon took office. The agreement called for a cease-fire, the withdrawal of American troops from South Vietnam and the exchange of prisoners, and it left the composition of a new South Vietnamese government to a commission made up of South Vietnamese officials and their communist opponents. Kissinger and his North Vietnamese counterpart, the high-ranking Le Duc Tho, were awarded the 1973 Nobel Peace Prize for the cease-fire agreement. (Le Duc Tho declined the award. Kissinger didn't collect his at the Oslo ceremony because of the threat of antiwar demonstrations there.) Of course, the agreement soon collapsed, the North Vietnamese overran the South, and in the spring of 1975 the world saw the ignominious pictures of Americans and South Vietnamese nationals being evacuated by helicopters from the roof of the American embassy. The issue of whether the 1973 agreement could have been reached in 1969 gets to the core, searing question about Vietnam: Did it have to last all those years?

Cruise America

New England Isles • Coast of Maine • Erie Canal • Great Lakes Chesapeake Bay • Colonial US East Coast • Nova Scotia Memorable camaraderie • Innovative fleet • Casual • Terrific scenic itineraries • Featured on Public Television • Departs from Rhode Island or Chicago • Our 37th Year • U.S. Flag
www.accl-smallships.com 800-556-7450
AMERICAN CANADIAN CARIBBEAN LINE

Inflatable Kayaks
Tough, Stable, Affordable, Light & Easy
5 Inflatable Kayaks, 14 Inflatable Boat Models,
Factory Direct Prices - Save Big $$$
See all our boats at
SeaEagle.com

12' 6"
SE 380x
Great for Fishing, Paddling & Exploring!
Visit web or call for FREE CATALOG!
1-800-944-7496
SEAEAGLE.com
Dept SM033B
19 North Columbia St. Port Jefferson, NY 11777

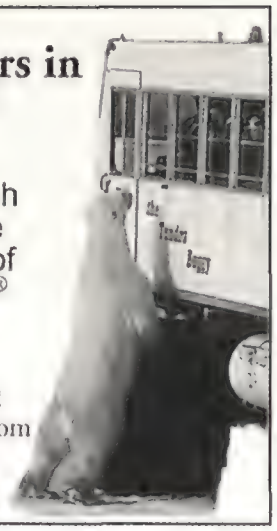
Cross-Culture
TRAVEL WITH A DIFFERENCE

Cultural, special interest small-group tours & hiking programs in 33 countries: Western & Central Europe, Asia, Australia & New Zealand; 17th year of in-depth itineraries, off-the-beaten-track visits, truly all-inclusive prices, exceptional value; FREE catalog:
www.crossculturein c.com · 800-491-1148

Great Walking Holidays

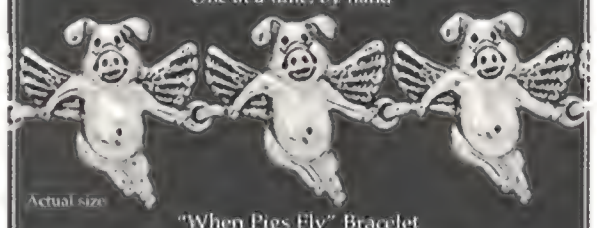
www.greatwalkingholidays.com Brochure 1-866-554-5151

IWA Polar Bears in Churchill
View and photograph polar bears from the safety and comfort of our Tundra Buggies®
Toll Free 1-800-663-9832
www.wildlifeadventures.com



©Richard Day/Daybreak Imagery

www.dallaspridgenjewelry.com
DALLAS PRIDGEN JEWELRY
One at a time, by hand



Actual size
"When Pigs Fly" Bracelet
9 links 14k Gold $595 Sterling Silver $165
Unconditionally guaranteed • 1-800-477-1856
PO Box 147 • Chapel Hill, NC 27514

COPPER CANYON

Costa Rica, Peru and More
Join us on our deluxe escorted and custom adventures. Free newsletter:
1-800-926-1140
www.calnative.com
CST 2027100-40
The California Native, 6701 W 87 Pl, Los Angeles, CA 90045

KITES!

Fly your colors sky high.
Free 80 page Catalog with hundreds of unusual kites, flags and windsocks.
19-ft USA Delta
Into The Wind • (800) 541-0314
1408-R Pearl St., Boulder, CO 80302
www.intothewind.com

NEW ZEALAND
Small, flexible personalized travel groups
BLACK SHEEP TOURING COMPANY
For the discerning adventure and luxury traveler
1-800-206-8322
www.BlackSheepTouring.co.nz

LIFT YOUR SPIRIT
Experience the awesome vastness & breathtaking beauty of the Far North. Arctic Canada, North Pole, Alaska, Russia, & Scandinavia. Wildlife, Cultural, Dog Sled, Skiing & Auroral Adventures.

ARCTIC ODYSSEYS™
(800) 574-3021 / FAX (206) 726-8488
www.ArcticOdysseys.com

new balance for men & women

Free Catalog
Over 70 Styles
Hard to Find Sizes - 100% Guaranteed
Active Soles - Dept 2SM2
Plymouth, MA 02360
Call 1-800-881-4322

It's fair to ask what alternative course Nixon's critics would have followed. Some serious people argued for complete withdrawal, on the grounds that the war was a loser. Some have argued that Nixon, after taking office, should have declared that the situation in Vietnam was far worse than he had thought, blamed it on the Democrats and sought a deal with the North Vietnamese like the one that was ultimately reached. Meanwhile, the argument goes, Nixon could have used tough rhetoric at home to assuage the Right. Whether the approach would have worked can't be known, but had it worked, it certainly would have been preferable to what happened instead.

During the 1968 campaign Kissinger, according to Walter Isaacson's biography, *Kissinger,* spoke scathingly about Nixon—until it looked as though Nixon might win, at which time Kissinger, then allied with Democratic candidate Hubert Humphrey, began to ingratiate himself with the Nixon camp, and even, according to Stanley Karnow's history, *Vietnam*, clandestinely supply it with information about Humphrey's plans.

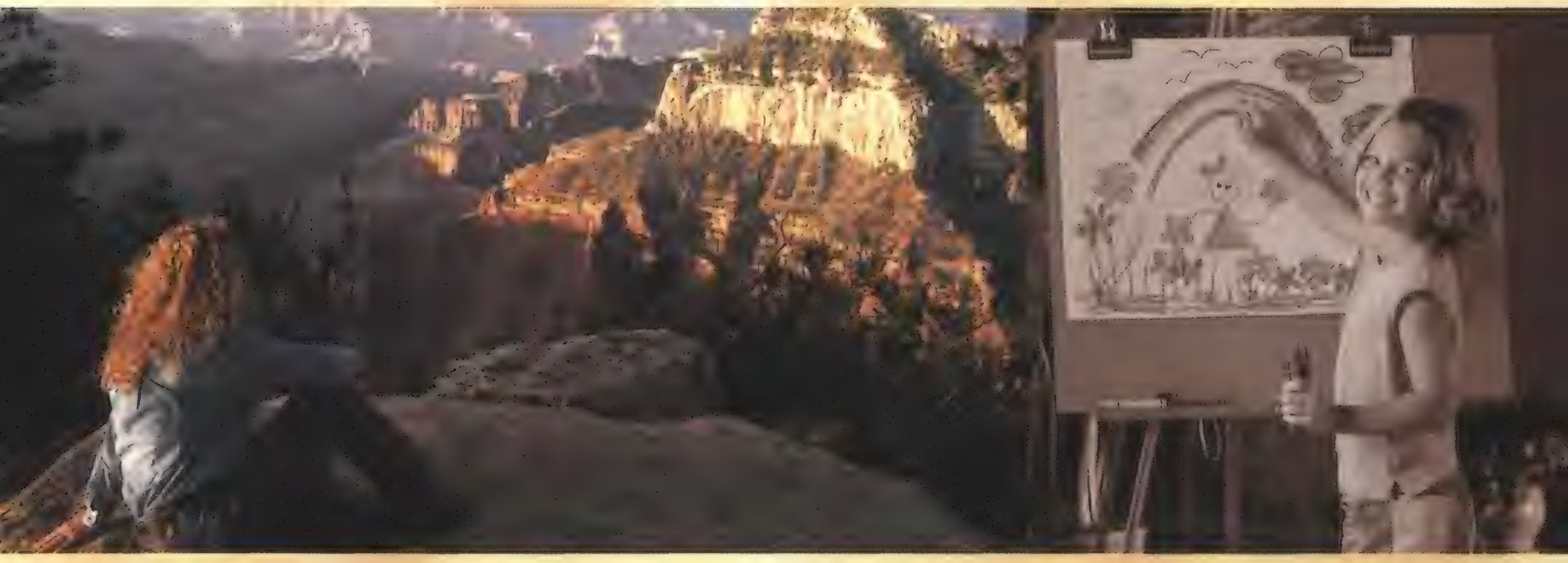
DIRCK HALSTEAD / TIMEPIX

Kissinger and (far right) Le Duc Tho confer in Paris before reaching a short-lived 1973 cease-fire agreement.

Once in office, Kissinger and Nixon said they were seeking "peace with honor": the abandonment of our South Vietnamese allies would be a dishonorable betrayal and would undermine our credibility in the world. (We ended up abandoning them anyway.) Even overlooking for the moment how the whole thing turned out, the "peace with honor" formulation was riddled with flaws. And the South Vietnamese regime was known to have been inept and hopelessly corrupt. In writing about the importance of our allies in South Vietnam, Kissinger gives minimal attention to the Vietnamese people but a great deal to South Vietnam's president Nguyen Van Thieu, calling him a great "patriot" and a "dauntless leader."

Kissinger, not unlike some American presidents, including Nixon, had a myopic affinity for strongmen—the Shah of Iran, Philippines president Ferdinand Marcos. A student of Metternich, the 19th-century Austrian

Remember when eight crayons were all the colors you needed?



Want to know where this is? Visit arizonaguide.com.

Recapture your childhood vision of a bright, benevolent world. Come to Arizona. For your free travel packet, contact the Arizona Office of Tourism toll-free at 866-806-8228.

ARIZONA
GRAND CANYON STATE

JUST RELEASED

Be The First To Own The New 2003 Gold American Eagles!

"Why buy now? Because the first coins issued by the U.S. Mint each year are always the highest quality."

$5 Gold Eagle .....$49.00 ea.
$10 Gold Eagle .....$119.00 ea.
★ Genuine U.S. Legal Tender
★ Purest gold coins ever issued by U.S. Mint

Your coin transactions are private.

The new 2003 "first strike" Gold American Eagles have been released and we anticipate an overwhelming demand. Why? Because the new dies used to stamp the coins leave the sharpest detail possible... resulting in stunningly beautiful coins. And because of our struggling economy and the war on terrorism, gold, forever recognized as a wealth protector, is in high demand. For a limited time you can order the $5 for $49 each and the $10 for $119 each... order today.

(800) 323-5055

INTERNATIONAL CURRENCY
9405 College St. • Beaumont, TX 77707
VV# 2SM303

Gold has always been the "world's wealth protector." Any economic uncertainty or world crises (like the war on terrorism) drives people to gold, as evidenced by the rise in gold prices over the last year. Now is the time to add the Gold American Eagles to your collection... before prices rise any more.

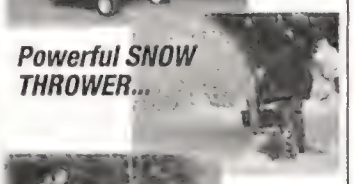
Versatile *New* DR® FIELD and BRUSH MOWER...

cuts down and chops up tall, wiry field grasses —even 2-1/2" thick hardwood saplings! Plus!

- **RECLAIMS** meadows, roadsides, fencelines, trails, pond edges, and woodlots...any area too overgrown for ordinary mowers!
- **PIVOTING MOWER DECK** follows the ground without scalping. **MULCHES** most vegetation into small pieces — so there's nothing to trip over or pick up.
- **4-SPEEDS, POWER-REVERSE!** 11 to 17 HP with and without electric-starting!

LOADED WITH NEW FEATURES and options — built-in fuel gauge, hour meter, light, brakes!

CONVERTS in seconds without tools to a —



MADE IN USA
GSA Approved

1-800-648-5577

YES! Please send me your FREE Catalog and Video about the new **DR® FIELD and BRUSH MOWER,** including models, powered attachments, and factory direct savings now in effect.

Name _____
Address _____
City _____ State _____ ZIP _____
Email _____

COUNTRY HOME PRODUCTS®, Dept. 45486X
Meigs Road, P.O. Box 25, Vergennes, VT 05491
www.drfieldbrush.com

SM
© 2003 CHP, Inc.

statesman, Kissinger was a practitioner of the "realist" (or realpolitik) school of diplomacy, which places emphasis on the state's interests and the use of military power to achieve them, and he preferred to deal with the strong leaders of nation-states who could deliver. Kissinger does say that the Kennedy administration's complicity in the 1963 overthrow of South Vietnam's leader General Ngo Dinh Diem conferred legitimacy on the North Vietnamese claim that the South Vietnamese government was illegitimate.

Kissinger makes almost no mention of the American lives lost while he and Nixon sought "peace with honor," and none of the fact that our pursuit of what many saw as a patently hopeless cause may have damaged our standing in the rest of the world as much as an earlier end to the war would have.

As he took office, Nixon faced two conflicting political exigencies. On one side were the ever-growing number of critics of the Vietnam adventure, a mobilized antiwar movement and increasing doubts among significant congressional figures. On the other side were those, mostly on the Right and substantial in number, who felt that we shouldn't lose. Kissinger slips at one point, saying the "peace with honor" doctrine was also Nixon's way of appeasing the Right. To appease the war's opponents, Nixon commenced the unilateral withdrawal of troops. Kissinger is correct that such withdrawals weakened his bargaining position with North Vietnam, and he admits that, oddly, he and Nixon mistakenly thought that the withdrawals would buy them time "for developing a new strategy." Instead, the military drawdowns simply increased domestic pressure for more of them.

Kissinger is dismissive of leading Senate opponents of the war—including the estimable J. William Fulbright, John Sherman Cooper, Mark Hatfield and Mike Mansfield—treating them as so many misguided pests. He describes the Congress elected in 1974, following Watergate and Nixon's forced resignation, as the "McGovernite congress,"

though the defining characteristic of the 75 Democrats elected to the House that year (the "Watergate babies") was their zeal for political reform. Kissinger maintains that McGovern lost the 1972 election over Vietnam—whereas a number of factors contributed to his defeat—and that in voting to reduce or cut off funds for actions in Indochina, the Congress was abrogating the last presidential election. Several of his statements in *Ending the Vietnam War* show that Kissinger didn't really understand public and congressional opposition to the war. The war's opponents, he writes, "destroyed our bargaining position"—as if there were no weaknesses in the policies themselves.

In telling his story, Kissinger sheds light on Nixon's peculiar governing style. He hated to give direct orders and sometimes issued orders he hoped or expected would not be carried out. He had an aversion to controversy among his advisers. And after Vice President Spiro Agnew said in one meeting that the South Vietnamese, with American support, should attack two North Vietnamese sanctuaries in Cambodia rather than just one, as had been proposed, Nixon agreed. But, according to Kissinger, Nixon was so annoyed that Agnew had staked out a more hawkish position than his own that he excluded Agnew from the next meeting on the war.

Kissinger isn't above taking swipes at former colleagues. He portrays the politically astute Mel Laird, secretary of defense, as slippery and busy covering his own tracks—though Laird was often proved right about the likely public reaction to proposed U.S. actions. For Kissinger to describe Laird as manipulative takes the pot-kettle formulation to new lengths. Kissinger, an accomplished charmer, was a masterly manipulator in a city where manipulativeness is a job requirement.

The Vietnam War was not without its tragicomic aspects. There was the futile hunt for the elusive COSVN, supposedly the North Vietnamese military headquarters in Cambodia—and a

AUDUBON

Specializing in the finest original Natural History Art from the 17th to 19th centuries. Works by Audubon, Gould, Besler and many others. Call or write for our brochure.

KENYON OPPENHEIMER, INC.
Wrigley Building, 410 N. Michigan Ave.
Chicago, IL 60611 • 312-642-5300
Est. 1969 *www.audubonart.com*

BEAU TIES LTD. *of Vermont*

Six catalogs a year featuring handcrafted silk bow ties, ascots, cummerbunds, customer-styled shirts and unique accessories.

For a free catalog:
Call: **800-488-8437** Fax: **802-388-7808** or
Email: **btl@beautiesltd.com**

Visit our web site at:
www.beautiesltd.com

SWISS ALPS—Day hiking since 1977
Optional length - Two guides per tour allow choice of moderate or more strenuous hike daily - Basing weekly in charming mountain villages - Call toll free for color brochure.
1-888-478-4004
www.swisshiking.com

AFRICA ◆ CHINA ◆ INDIA ◆ JAPAN ◆ NEPAL ◆ SRI LANKA ◆ TAIWAN
Since 1989
UPTON TEA IMPORTS
Purveyor of the World's Finest Teas
1-800-234-8327 *www.uptontea.com*
Free catalog listing over 320 varieties of garden-fresh, loose tea
34 A Hayden Rowe St.* Hopkinton, MA 01748

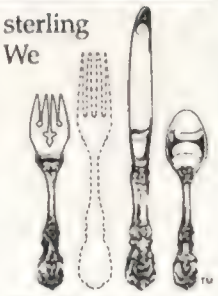
hilton head island
luxury villas and rental homes
beach • marina • shopping
dining • golf & tennis pkgs
surf our site!
FREE vacation guide • 1.800.824.4136
PALMETTODUNESRESORT.COM

Museum Quality
Nature and Science Gifts Online
www.naturecollections.com
NATURE PARK INTERNATIONAL
P.O. Box 630550, Ojus, FL 33163-0550
Telephone: 305.620.8889 Fax: 305.620.8868
E-mail: customerservice@naturecollections.com

CANADA
Let Mother Nature Be Your Guide
Pure Canada's Outdoor Experiences Guide 2003
From scaling snow-capped mountains to a walk on the ocean floor, there's an outdoor experience to match your imagination. Discover your incredible Canada vacation and an excellent exchange rate. Call for your free copy of the 2003 Outdoor Experiences Guide and the new Pure Canada magazine.
Call 1-877-8-CANADA
Op. 815 or visit
www.travelcanada.ca/nhy
Canada
Discover our true nature

MISSING A PIECE OF YOUR PATTERN?®

Replace pieces or add to your sterling silver at up to 75% off retail. We specialize in new and used flatware and hollowware. Over 1,200 patterns in stock. Call or write for a free inventory of your sterling pattern. *(We buy sterling silver, with a careful appraisal for maximum value.)*



Shown: Francis I by Reed & Barton

Beverly Bremer
SILVER SHOP
3164 Peachtree Rd. NE, Dept SM, Atlanta, GA 30305 / Mon.-Sat.10-5
Tel: 404-261-4009, Fax: 404-261-9708 www.beverlybremer.com

Polar Bears
of Churchill, Manitoba

Join us for the world's greatest gathering of polar bears, viewed from the safety and comfort of Polar Buggies™.

7-day Tour: $2,495
800-368-0077
www.travelwild.com
SM65

TravelWild EXPEDITIONS

A Great Home Deserves Great Art!

Discover how a faithful replica on artist's canvas can enhance any room's beauty. Masterpieces from famed museums and little known treasures from private collections. Richly carved hand-gilded wood frames.

Young Girl Sewing by Renoir

Call toll-free for a complimentary catalog,
1-800-222-6827, Dept. 1464
THE MASTERS' COLLECTION
www.masterscollection.com
Licensee of oil reproductions on canvas for the Newport Mansions Collections.

MONGOLIA & BEYOND
TIBET • BHUTAN • NEPAL
Travel with the Pioneers in Exceptional Adventures to Asia.
Call for Brochure!
1-800-998-6634
www.NomadicExpeditions.com

NOMADIC EXPEDITIONS

leading rationale for U.S. military incursion into Cambodia in 1970. The South Vietnamese troops and their American advisers found only deserted huts. Nevertheless, Kissinger describes the attack as a success, leading to the capture of documents, arms and ammunition, which, according to Karnow, were quickly replaced. There was also the raid by American commandos on the Son Tay prison in North Vietnam, which was believed to hold American prisoners of war but turned out to be empty. U.S. intelligence had said the prison was "closed," Kissinger says, which it interpreted as "locked."

Like any case for the defense, *Ending the Vietnam War* is selective. Kissinger omits several relevant matters or deals with them in triumphs of understatement. He doesn't mention that two of his senior aides (Anthony Lake and Roger Morris) quit in 1970 in protest over the expansion of the war into Cambodia. And as for the national upheaval and constitutional crisis that was Watergate, Kissinger says that Nixon felt unappreciated for his effort to withdraw troops, that antiwar sentiment "touched Nixon on his rawest nerve" and that he saw enemies all around him and so engaged in "methods of all-out political combat." That's it. No mention of Nixon's "enemies list"; of the White House's hiring a goon squad (the "plumbers") to conduct break-ins; or of Kissinger's supplying names to the FBI for wiretaps of his own aides and of journalists, to trace leaks about the war.

Clearly, it's Cambodia that most sticks in Kissinger's craw—with good reason, given the havoc following U.S. military action, and the horrific way things turned out, with more than a million Cambodians slaughtered by the Khmer Rouge. One justification for U.S. military actions in Cambodia was that Vietnam might overrun Cambodia—whether it actually intended to do so isn't yet known—which would have jeopardized the plan for turning the war over to the South Vietnamese.

Yet Kissinger, according to this fascinating and sad book, persisted in be-

www.breakell.com

1 ¼"

HEART KEY
A most romantic token from James Breakell's workshop. Finely detailed pendant on 18" chain. Sterling silver $35, 14k gold $163. Add $6 handling. Catalog available (800) 767-6411
J.H. Breakell & Co.
132 Spring St., Dept. SMHK, Newport, RI 02840

Undiscovered Italy
Villa Rentals
from the Alps to the vineyards, from the hill towns to the sea

THE PARKER COMPANY FREE CATALOG
www.theparkercompany.com 800-280-2811

EURO Bike & Walking tours
30th year
Distinctive biking and walking tours throughout Europe.
Free catalog
1-800-321-6060
www.eurobike.com info@eurobike.com

Rose Bracelet made by hand to last forever in sterling silver
SOFIA JEWELRY
800 - 939 - 0188 www.sofiajewelry.com
visa, mc, amex $188

CHINA "CUSTOM PRIVATE TOURS"

- Fully Escorted/Custom Tours
- Private Guides & Drivers
- Best Quality & Price
- Authentic China Experience

TOLL FREE: 1-866-40-CHINA (24462)
www.east-tours.com info@east-tours.com

KIAWAH ISLAND | GOLF & TENNIS | CHARLESTON | WEB SPECIALS
Kiawah
Near Historic Charleston
WEB & 32-PAGE GUIDES
kiawahstays.com • 1.800.803.5153
Book-On-Line • Great Beach Vacations
#75X

If you are moving soon, please send an address label from a recent issue along with your new address to:
Smithsonian Membership Data-Center
P.O. Box 420312
Palm Coast, FL 32142-0312
or call: 1-800-766-2149

Snowy River

Made in Australia by **Akubra®**

From the great Australian outback, a pure fur felt hat for sun or rain. Fully lined, 3 1/4" brim.

No. 1611 Snowy River.....$102.50

Specify size: 6 3/4-8 1/8 and color: Fawn, Gray or Black. Add $6.00 for handling. Satisfaction guaranteed.

Visit our web site or request our unique catalog

- Bosca® leather goods • Celtic Jewelry
- Filson® clothing and luggage

800-324-4934 www.davidmorgan.com

David Morgan

11812 N Creek Pkwy N, Ste 103•Bothell WA

MEN'S WIDE SHOES

EEE-EEEEEE, SIZES 5-13

•FREE catalog
•High quality
•200 styles

HITCHCOCK SHOES, INC.

Dept. 21C Hingham, MA 02043

1-800-992-WIDE www.wideshoes.com

AUTHORS WANTED

Leading subsidy book publisher seeks manuscripts. Fiction, non-fiction, poetry, juvenile, religious, etc. New authors welcomed. For free 32-page illustrated guidebook TD-72, call **1-800-821-3990** or write to: **Vantage Press, 516 W 34th St., New York, NY 10001**

Smithsonian (ISSN 0037-7333) is published monthly by Smithsonian Business Ventures, P.O. Box 37012, MRC 951, Washington, D.C. 20013. © Smithsonian Institution 2003. All rights reserved. Reproduction in whole or in part without permission is prohibited. Editorial offices are at MRC 951, Washington, D.C. 20013 (202-275-2000). Advertising and circulation offices are at 420 Lexington Ave., New York, NY 10170 (212-490-2510). **SUBSCRIPTION PRICES:** United States and possessions: $32 a year payable in U.S. funds. Canada add $13 (U.S. funds) for each year. Foreign add $26 (U.S. funds) for each year. Ninety percent of dues is designated for magazine subscriptions. Current issue price is $4 (U.S. funds). Back issue price is $5 (U.S. funds). Periodical postage paid at Washington, D.C. and additional mailing offices. **MAILING LISTS:** From time to time we make our subscriber list available to companies that sell goods and services by mail that we believe would interest our readers. If you would rather not receive such mailings, please send your current mailing label, or an exact copy, to: Smithsonian, Mail Preference Service, P.O. Box 420311, Palm Coast, FL 32142-0311. **SUBSCRIPTION SERVICE:** Should you wish to change your address, or order new subscriptions, you can do so by writing Smithsonian, P.O. Box 420311, Palm Coast, FL 32142-0311, or by calling 1-800-766-2149 (outside of U.S., call 1-386-447-2721). Postmaster: Send address changes to Smithsonian, P.O. Box 420312, Palm Coast, FL 32142-0312. Printed in the USA. Canadian Publication Agreement No. 40043911. Canadian return address: Station A, P.O. Box 54, Windsor, Ontario N9A 6J5

lieving that, given enough time and resources, his Vietnam policy would succeed. In other words, it was the war opponents' fault that the policy failed. In 1975, after Ford had taken office as president, Kissinger writes that the administration's "sole remaining card to prevent Saigon's collapse" was additional money from Congress to fund the war effort—an appropriation that Congress was resisting. The denial of the money may well have sped the collapse of the South Vietnamese government, but how long it could have been sustained is another matter. Late in the book, Kissinger addresses the crucial question: "Was it worth it?" His reply: "Probably not for us; almost surely for Saigon, about whose survival the war had, after all, been fought." This is at once a monumental admission and an avoidance of the fact that Saigon collapsed despite our five years of waste of human lives and national treasure. Elsewhere in *Ending the Vietnam War*, Kissinger says, "With anything like the support extended to allies in Korea, the Gulf, and the Balkans, they [South Vietnam, Cambodia and Laos] might have survived until the erosion of Communism set in." This assertion assumes that substantial support would have lasted another decade and a half—an extraordinary leap of imagination—and it also is akin to equating apples with zebras. (And despite the collapse of communism elsewhere, Vietnam remains a stable communist state, with capitalist features.) If Kissinger truly continues to believe these things, one is forced to conclude that he was—and still is—deluding himself. Kissinger and Nixon were in a bunker of their own, clinging to the false promise of Vietnamization, holding to a misbegotten concept of national honor and railing at the war's opponents. Great leaders have the insight and longsightedness to make the right decisions in dire circumstances: Abraham Lincoln and Winston Churchill, to name two, got it right. The reputations of Nixon and Kissinger are doomed to carry the heavy freight of the fact that they did not.

Swim at Home™

Swim or exercise against a smooth current adjustable to any speed or ability. Ideal for swimming, water aerobics, rehabilitation and fun. The 8' x 15' Endless Pool® is simple to maintain, economical to run, and easy to install inside or outdoors.

FOR FREE VIDEO CALL

(800) 233-0741, Ext. 2601

or visit www.endlesspools.com

ENDLESS POOLS®

200 E Dutton Mill Rd, Dept 2601
Aston, PA 19014

archaeological tours

led by noted scholars

superb itineraries, unsurpassed service

2003 TOURS

SPRING
Egypt for Grandparents & Grandchildren
Malta, Sardinia & Corsica
China & Yangtze River
Cyprus, Crete & Santorini
Spain
Bulgaria & Romania
Sicily & So. Italy
China's Silk Road

SUMMER
Eastern Turkey
Scotland
Etruscan Italy
Peru for Grandparents & Grandchildren

FALL
Spain: Pilgrim's Road
Western Turkey
Ethiopia
Syria & Jordan
Georgia & Armenia

Oases of Egypt
Spain: Barcelona Bilbao & Madrid
China: Ancient Capitals
Chile & Easter Is.
Sicily & So. Italy

WINTER
North India
Egypt
Guatemala
Mali & Burkino Faso
...and more

271 Madison Ave. 904sm, NY, NY 10016
(212) 986-3054 Toll Free: (866) 740-5130
www.archaeologicaltrs.com

Once Upon a Time

Children's books by celebrities are as old as the Dead Sea Scrolls. Here are our favorites

BY STEVE WILSON

Jerry Seinfeld, Jamie Lee Curtis, Bill Cosby, Julie Andrews, Spike Lee—all have written children's books in the past few years. But it's not a recent trend. Famous people dabbling in this lucrative genre is a centuries-old practice. We unearthed these lesser-known works from well-known personages.

GIRLS ARE FROM ISIS, BOYS ARE FROM RA

BY CLEOPATRA

WHETHER HE'S from Egypt or Rome, whether he's your boyfriend or brother (or both), whether he's conquering your country or your heart, a boy is as mysterious as a sphinx. What's on a boy's mind? What do boys like in girls? Will they be just as difficult in the afterlife? The queen spells it out for you in plain and simple hieroglyphs, also sharing her advice on headdress maintenance and what to do if you haven't married by the age of 10, as well as tips for the proper care and grooming of your pet asp.

WHY DADDY HAD MOMMY BEHEADED

BY HENRY VIII

WITH THIS TOUCHING STORY OF coping, King Henry helps royal offspring everywhere adjust to the unpleasant realities of monarchy. Young Princess Jennifer wakes up one day to find Mommy gone. Neither handmaiden nor castle guard can tell Jennifer where her mother went, so she asks Daddy, the king. Gently, Daddy tells Jennifer that Mommy went to the Kingdom of Uxoricide with a friend and won't be coming back. He says Jennifer is getting a new mommy very soon, and a brother!—that is, if the new mommy knows what's good for her. Jennifer is sad until she meets her new mommy, who brings her gynger brede and plays dice with her. Oh, what fun they'll have together!

PAULETTE'S ADVENTURE AMONG THE RABBLE

BY MARIE ANTOINETTE

DETAINED BY A broken carriage wheel en route to a ball at the dauphin's château, young Paulette steps outside for a bit of fresh air. And there she sees a real live peasant! Though crass and vulgar, the peasant is kind and respectful to Paulette, and helps the coachman repair the wheel. As a token of her appreciation, Paulette lets the peasant kiss her begloved hand. She immediately burns the glove, of course, and goes home to change her gown, but, even so, she tells her friends at the ball that peasants aren't so bad after all. Read the book that every child of the court is raving about, the first work by Her Majesty!

THE VOICES AND I HAVE A GRAND DAY OUT

BY JOAN OF ARC

IT'S JUST ANOTHER boring day on the farm for Joanie until the voices of the saints pay a visit. "Let's have some fun!" they say. So Joanie—always the tomboy!—puts aside her chores and joins her special friends for an afternoon to remember: skipping stones in the creek, turning cartwheels in the field, swiping a hunk of Brie from Farmer Pierre. Joanie has such a good time that she almost cries when the sun goes down and the voices have to leave. "Don't worry, we'll be back real soon," they say. "That would be swell!" says Joanie, nodding off to pleasant dreams of slaughtering Englishmen.

THE RAINY DAY FUN MANIFESTO

BY KARL MARX

MARX GIVES BORED young workers lots of ways to unite and to learn something, too, in this Engaging Activity Book™. Readers become comrades through games such as "Connect the Dots from Democracy to Socialism" and "Get Through the Economic and Social Collapse of Industrial Europe and North America Maze," and skits such as "The Proletariat and the Bourgeoisie Discuss Public Ownership of Property." Using lively, state-owned drawings, Marx illustrates the finer points of a philosophy that will change every playground it touches. Plus: a tear-out membership form for the International Workingman's Association Junior League!

KATHRYN ADAMS

American Persistence

Our process is consistent and repeatable.

If only your swing were that way.

After 30 years of managing fixed-income investments, our method for analyzing bonds is dialed in. Consistent and repeatable, it's a rigorous screening process that is designed to allow our portfolio-management teams to find the undervalued opportunities in the marketplace. The results speak for themselves. If only there were a tour for bond investing.

Overall Morningstar Ratings™	
Ginnie Mae	★★★★
Inflation-Adjusted Bond	★★★★★
Tax-Free Bond	★★★★

Overall Morningstar Ratings™ as of 10/31/02. Ginnie Mae and Inflation-Adjusted Bond funds rated for the overall period among 274 Intermediate Government bond funds. Tax-Free Bond fund rated for the overall period among 131 Muni National Interm bond funds. Past performance is no guarantee of future results.

Investment returns and principal values may fluctuate and redemption value may be more or less than original cost.

For the most current performance information, please call us or visit our Web site.

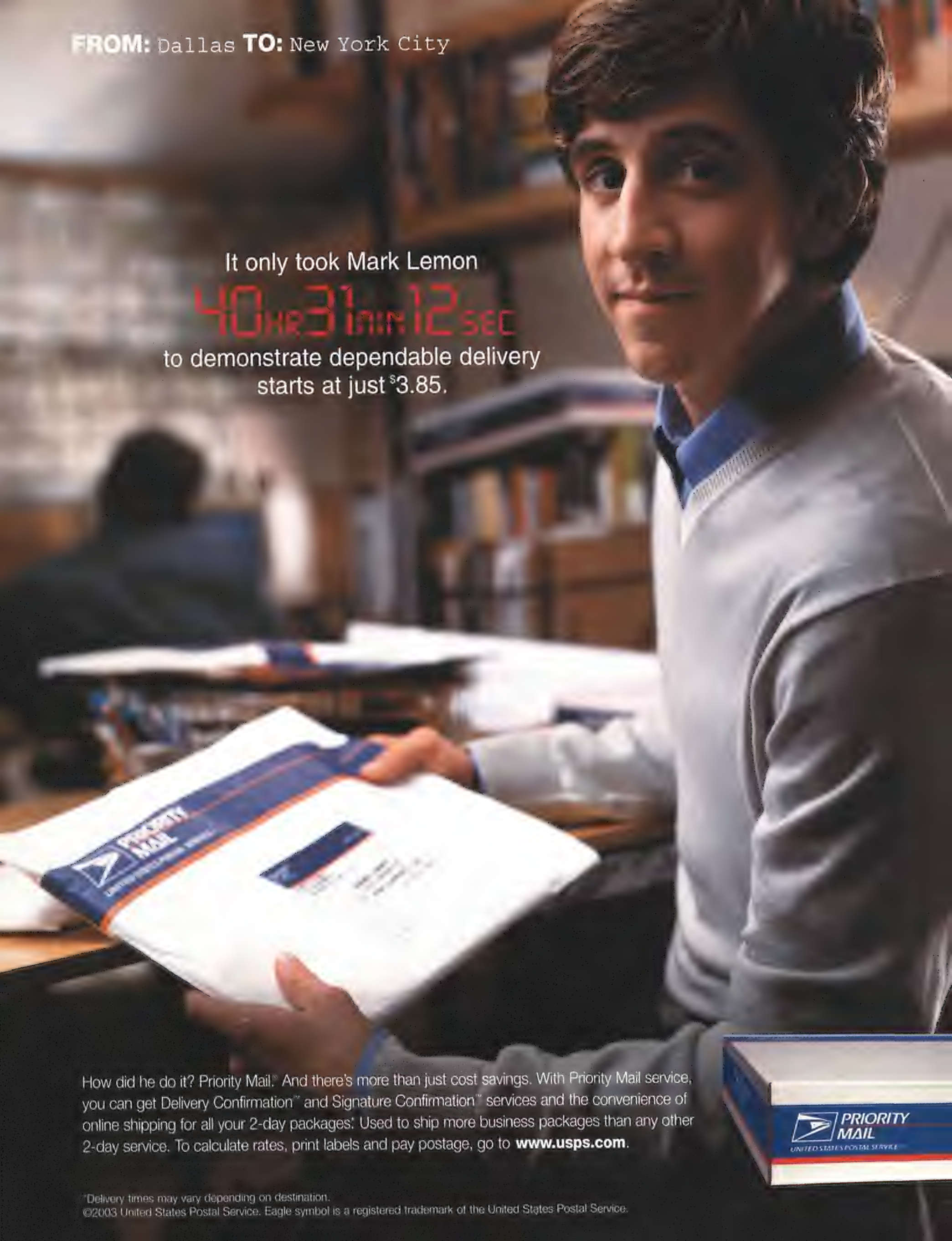
For each fund with at least a 3-year history, Morningstar calculates a Morningstar Rating™ based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's monthly performance (including the effects of sales charges, loads and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. The top 10% of funds in each category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars and the bottom 10% receive 1 star. (Each share class is counted as a fraction of one fund within this scale and rated separately, which may cause slight variations in the distribution percentages.) The Overall Morningstar Rating for a fund is derived from a weighted average of the performance figures associated with its 3-, 5- and 10-year (if applicable) Morningstar Rating metrics. The funds had the following ratings for the 3-, 5- and 10-year periods, respectively. Ginnie Mae 3, 3, 4 out of 274, 240, 102 Intermediate Government bond funds. Inflation-Adjusted Bond 4, 5, NA out of 274, 240, NA Intermediate Government bond funds. Tax-Free Bond 4, 5, 4 out of 131, 117, 40 Muni National Interm bond funds. Morningstar Rating is for the investor share class only; other classes may have different performance characteristics.

Please call 1-877-44-AMCEN or visit www.americancentury.com to obtain a prospectus with more complete information, including charges, expenses and minimums. Be sure to read it carefully before you invest or send money.

American Century Investment Services, Inc. © 2002 American Century Services Corporation

AMERICAN CENTURY.

Investment Managers


FROM: Dallas TO: New York City
It only took Mark Lemon
40HR 31MIN 12SEC
to demonstrate dependable delivery
starts at just $3.85.
How did he do it? Priority Mail.® And there's more than just cost savings. With Priority Mail service, you can get Delivery Confirmation™ and Signature Confirmation™ services and the convenience of online shipping for all your 2-day packages*. Used to ship more business packages than any other 2-day service. To calculate rates, print labels and pay postage, go to www.usps.com.
PRIORITY MAIL
UNITED STATES POSTAL SERVICE

*Delivery times may vary depending on destination.

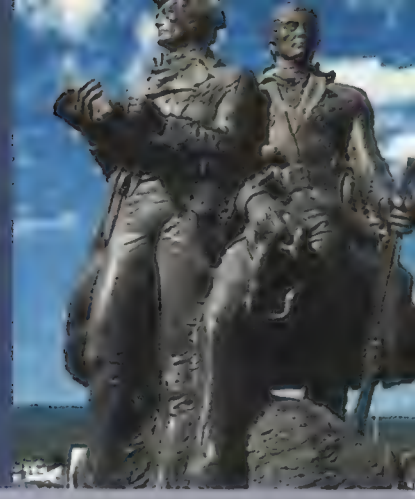
©2003 United States Postal Service. Eagle symbol is a registered trademark of the United States Postal Service.

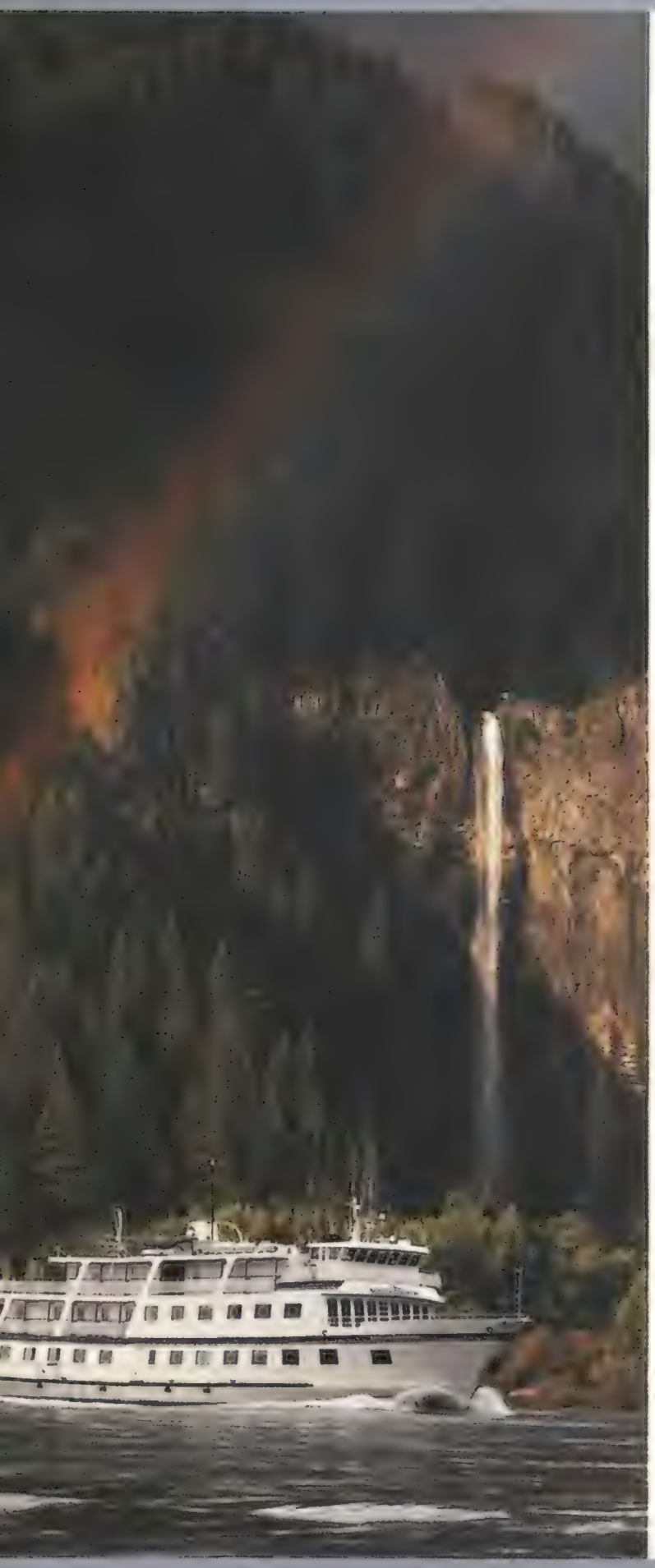
TREADING GENTLY ON THE LEWIS & CLARK TRAIL

Lewis and Clark
Bicentennial projects
will leave a legacy of caring
for the land.

Cruise the
Columbia & Snake Rivers

IN THE WAKE OF LEWIS AND CLARK





A Legacy of Exploration

In the first year of the Corps of Discovery's Bicentennial celebration, cruise in the wake of Lewis and Clark along nearly 1,000 miles of the West's greatest rivers. On our seven-night cruise round trip from Portland, Oregon, so much is included:

- **Explore Lewis & Clark's Fort Clatsop near the mouth of the Columbia.**
- **Cruise the spectacular Columbia River Gorge during daylight hours.**
- **Stand in the ruts of the Oregon Trail, and tour the historic Whitman Mission.**
- **Sample fine wines in Washington's Walla Walla wine district.**
- **Travel by jetboat deep into Hells Canyon.**
- **Visit Maryhill Museum and the Columbia Gorge Discovery Center.**
- **Pass through the locks of eight major dams.**
- **Enjoy an outside cabin, all meals on board, and expert narration.**

SAVE
up to $250
per person
when you book six
months in advance.

Fall Voyages begin
September 11, 2003.

Call your Travel Agent today or
for more information please call
1-800-460-7229

Visit www.cruisewest.com
for complete cruise information.

CruiseWest®
Up-close, casual and personal.

Photo by Brett Dufur

Last spring, Boy Scouts, history buffs, and members of the Nez Perce tribe gathered at the confluence of the Clearwater and Potlatch rivers near Lewiston, Idaho. Their mission: to clean up a longtime local dumping ground before the start of the Lewis and Clark bicentennial, which commemorates the historic expedition of 1803-1806.

Over the two-day effort, the volunteer crew cleared away a half-century's worth of garbage, including beer bottles, appliances, 1960s license plates, and even an old set of polio braces. They also learned why Arrow Junction, as the confluence is called, is significant to the Nez Perce, who have hunted, fished, and camped in the area for centuries. "We tied history to conservation," says Mike Venso of the Idaho Chapter of the Lewis and Clark Trail Heritage Foundation, who helped organize the event with the Nez Perce Tribe's Water Resources Division.

Halfway across the country in Missouri, more than 900 volunteers gathered to take part in "River Relief 2002." Together they pulled tons of trash from the Missouri River and cleaned up several sections of the Katy Trail, a hiking-biking route along the waterway. Pre-cleanup workshops helped students understand the river's natural history from the perspective of the Corps of Discovery.

If Meriwether Lewis and William Clark traveled across the United States today, they wouldn't recognize much. Rivers have been dredged and dammed, and landscapes are laced with utility lines and cell phone towers. The wildlife and native people who once ranged free have seen most of the countryside developed, pushing animals onto refuges and people onto reservations. But some wild areas remain intact, and the Lewis and Clark Bicentennial has inspired a movement toward returning other sections of the route to the way the explorers saw it in 1803-1806. "We need to understand that what we walk on is alive. It has a spirit," says Gerard Baker, superintendent of the Lewis and Clark National Historic Trail and a member of the Mandan-Hidatsa Tribes of the Fort Berthold Reservation in North Dakota. Some of the efforts, like the Idaho river cleanup, are small, grassroots projects. Others are led by major national conservation organizations. For example, American Rivers launched a "Voyage of Recovery" campaign focusing on the rivers traveled by the expedition in 1803-1806. Keystones of the effort include reviving healthy runs of wild salmon on the Snake and Columbia, reforming dam operations, and helping some sections of the Missouri River return to their natural, free-flowing state. The organization's "Discovering the Rivers of Lewis & Clark" touring exhibit will remain on the

The natural limestone formation known as "Eye of the Needle" along the wild and scenic Missouri River in north-central Montana was destroyed by vandals who toppled the top of the arch in 1997.

Photo by Mike Venso

Photo by Mike Venso

Cherishing a wild place: The cleanup of the Clearwater River at Arrow Junction in Idaho is a living example of history and conservation's powerful combination.

road throughout the bicentennial, helping people understand waterways' natural and human history. More than a million people had toured the exhibit by early 2003.

"The rivers Lewis and Clark traveled are in failing health, and many of the species described in their journals may soon be gone forever," said Rebecca R. Wodder, American Rivers president. "Restoring portions of these rivers they traveled to a condition the explorers might recognize would be the finest possible tribute to Lewis, Clark, and the rest of their brave expedition."

Meanwhile, the Sierra Club is using the bicentennial as the springboard for a five-year push to preserve what's left of the wildlands along and near the expedition's route. Noting that as many as 25 million people may travel all or part of the Lewis and Clark Trail during the bicentennial years, Sierra Club executive director Carl Pope urges visitors "to go to the country Lewis and Clark explored with the goal of falling in love," because people who cherish a wild place are willing to advocate for its preservation. Although some of the plant and animal species the expedition described have vanished from the continent, Sierra Club supporters say it's not too late to act decisively on behalf of those that remain.

In addition to educating Americans about "what's lost and what's left," the Sierra Club has spearheaded many field projects including planting cottonwood trees in North Dakota; mapping, monitoring, and taking inventory of forest land in the Lolo Pass area on the Montana-Idaho border; and working to establish trails near the Falls of the Ohio in the Louisville, Kentucky, area, where Meriwether Lewis picked up his co-captain William Clark in the fall of 1803. The Student Conservation Association is another group active in fieldwork along the explorers' path. SCA's high school and college-age volunteers have recently pitched in for trail construction and maintenance projects at North Dakota's Audubon National Wildlife Refuge, Oregon's Mount Hood, and Washington's Columbia River National Wildlife Refuge.

Many projects have brought together a wide range of players in unlikely partnerships. In the Pacific Northwest, a diverse coalition including the National Park Service, the Oregon Department of Transportation, the Oregon National Guard, Weyerhaeuser, and others is working to create a trail network amid restored watershed and forest lands where Lewis and Clark wintered in 1805-1806 and where, Clatsop Indians have lived for centuries. "Over the next several decades, we can actually create a vignette of what it was like at the mouth of the Columbia in the 19th century," says Chip Jenkins, superintendent at Fort Clatsop National Memorial. "I think it's just a tremendous legacy of what can come out of the Lewis and Clark Bicentennial for the American people and for the people of Oregon and Washington." And legacy-building is one of the prime aims of the bicentennial commemoration. No matter what the

SNAPSHOTS OF THE ARROW JUNCTION CLEANUP PROJECT BY THE IDAHO CHAPTER OF THE LEWIS AND CLARK TRAIL HERITAGE FOUNDATION, MAY 2002.

Photos by Mike Venso

West Virginia
Wild and Wonderful

Antiquing Golf Festivals Dining Spas Shopping Hiking Driving Tours Fishing

To truly experience the Lewis and Clark expedition, you must start where it all began.
Re-enactments, celebrations, educational programs and more are waiting in wild and wonderful West Virginia.

West Virginia State Parks

Experience a vacation mecca with overnight facilities and recreational opportunities surrounded by natural wonders. Enjoy lodges, cabins, campgrounds, golf, trails, historic sites, special packages and genuine hospitality that are found only in West Virginia State Parks.

www.wvstateparks.com
1-800-CALL WVA

Mercer County

Step back to the Victorian period by visiting historic Bramwell, located in West Virginia's Southern Gateway. Nestled along the foothills of majestic East River Mountain, the area offers scenic beauty, outdoor adventure, a variety of attractions, shopping and much more. Call Mercer County Convention & Visitors Bureau for a free guide.

www.mccvb.com
1-800-221-3206

www.callwva.com | **FREE TRAVEL GUIDE** | **1-800-CALL WVA**

Photo by Brett Dufur

Adjacent to the Missouri River in the town of Lupus, MO, homes were raised above the river's floodplain to conserve the natural flow of the river in lieu of using dams and levies.

project, the idea is to ensure that future travelers will still be able to experience some of what Lewis and Clark encountered. "Respect for the land needs to be a priority for all of us," says Gerard Baker. "We need to respect public, tribal, and private lands. We can all learn from Lewis and Clark history. We should preserve all of our cultures, and our earth, for future generations."

Re-enactors rekindle the history of the Lewis and Clark expedition, and reinforce the importance of preserving the trail's natural treasures for future generations.

Photo by Brett Dufur

Larry Epstein, 2002-2003 president of the Lewis and Clark Trail Heritage Foundation, agrees. "As you think about and travel the Lewis and Clark National Historic Trail, remember this land is your land and my land, but we are only visitors," he says. "Cherish the sights, sounds, and the story of the trail. Step lightly and leave the trail for your children's children to enjoy."

Julie Fanselow is author of Traveling the Lewis & Clark Trail *(Falcon/Globe Pequot) and editor of the www.lewisandclarktravel.info web site.*

Cover Photo by Mike Venso: Camas blooms at Packer Meadow near Lolo Pass on the Montana-Idaho border. Mike Venso is a photojournalist documenting various aspects of the Lewis & Clark expedition.

Brett Dufur, photographer and journalist, is a leading publisher of Missouri-related guidebooks.

Advertiser Information

These advertisers invite you to call or visit them on-line for more information.

American West Steamboat
1-800-434-1232
www.columbiarivercruise.com

Cruise West
1-800-460-7229
www.cruisewest.com

Lewis and Clark's Northwest Adventure
www.nwlewisclark.com

Mercer County, West Virginia
1-800-221-3206
www.mccvb.com

West Virginia
1-800-CALL WVA
www.callwva.com

West Virginia State Parks
1-800-CALL WVA
www.wvstateparks.com

TRAVELING LIGHTLY ON THE TRAIL

Here are some ways modern explorers can help preserve the Lewis and Clark National Historic Trail's natural treasures and recreational riches for future generations:

Litter collection is limited in many areas. Pack up all garbage.

Leave Native American sacred sites and cultural artifacts of all sorts undisturbed.

Keep a safe distance from wildlife.

Check locally for travel and recreation restrictions. For example, the Clearwater National Forest in Idaho is requiring permits for travel on the Lolo Motorway during the bicentennial years. Some Native American reservations issue permits for activities including camping or fishing. Always get permission before walking or driving on private land.

For outdoor activities, travel with a partner and let family or friends know where you're going. Carry water; one gallon per person per day is recommended. In the backcountry, carry and know how to use maps and a compass.

In heavily used areas, concentrate activities in areas already impacted by earlier use. Stay on established trails, use existing campsites, and leave a clean camp for others.

In more lightly used areas, disperse campsites to minimize damage to any one site. If a fire is necessary, build it in a fire pan. Bury human waste away from water sources. Leave no trace of your visit.

When traveling on water, provide a float plan to family or friends. Carry and use personal flotation devices and other safety equipment.

Learn about efforts to preserve the lands and waterways along Lewis and Clark's route. For more information, contact American Rivers (www.americanrivers.org), the Lewis and Clark Trail Heritage Foundation (www.lewisandclark.org), the Sierra Club (www.sierraclub.org), and the Student Conservation Association (www.thesca.org). More information on the Lewis and Clark National Historic Trail is available at www.nps.gov/lecl.

Cruise into History®

along the

Columbia, Snake & Willamette Rivers

Re-live The Rich History & Legends Of The American West On

America's Most Historic & Scenic Rivers

Along the Oregon Trail, Lewis & Clark Route and Columbia River Gorge

America's Newest Sternwheeler Cruise Ships

QUEEN OF THE WEST

and the brand-new, elegant

EMPRESS OF THE NORTH

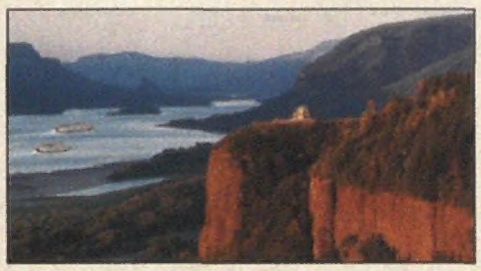
Featuring:

- Faithfully re-created **19th Century** Sternwheelers.
- **7 and 11-Night** Cruises Year 'Round from Portland, Oregon.
- Cruise up to **1,000 miles** through 3 states: Oregon, Washington & Idaho and the famous **Columbia River Gorge National Scenic Area**.
- Up to 112 **Deluxe**, spacious outside suites & staterooms, most with **private verandahs**.
- All staterooms have-TV's, VCR's or DVD's & **private bathrooms**
- **Live**, Nightly **Showboat Entertainment** & Dancing.
- **2 Showrooms** with different musical themes and entertainers each evening.
- **Fine Dining** at an open, single seating!

LEWIS & CLARK BICENTENNIAL

All Shore Excursions Included! Experience:

- **Fully narrated**; itineraries & **shore excursions: All included** in the cost of the cruise.
- Follow the routes of **Lewis & Clark**, the **Oregon Trail Pioneers** and the **Great Sternwheeler Era**.
- **New, deluxe touring coaches** for all-weather comfort.
- Hells Canyon **Jet Boat Ride**
- **Cowboys, Indians, Lewis & Clark** and Explorers.
- **Sky high waterfalls** amidst the greatest concentration of waterfalls in America.
- World renowned **Columbia River Maritime Museum**.
- **Mt. St. Helens** Volcano
- Historic **Maryhill Museum**
- Rugged **Oregon Coast**, National Park Service Historic Sites and **Lewis & Clark's Fort Clatsop**.
- See snow-capped Volcanic Peaks.
- Transit 8 **massive locks & dams** and visit one.
- See the **Oregon Trail**.
- Visit the brand-new **Tamastslikt Cultural Institute** & Columbia Gorge Discovery Center.
- Lush forests, wildlife, rivertowns and **wine tasting**.



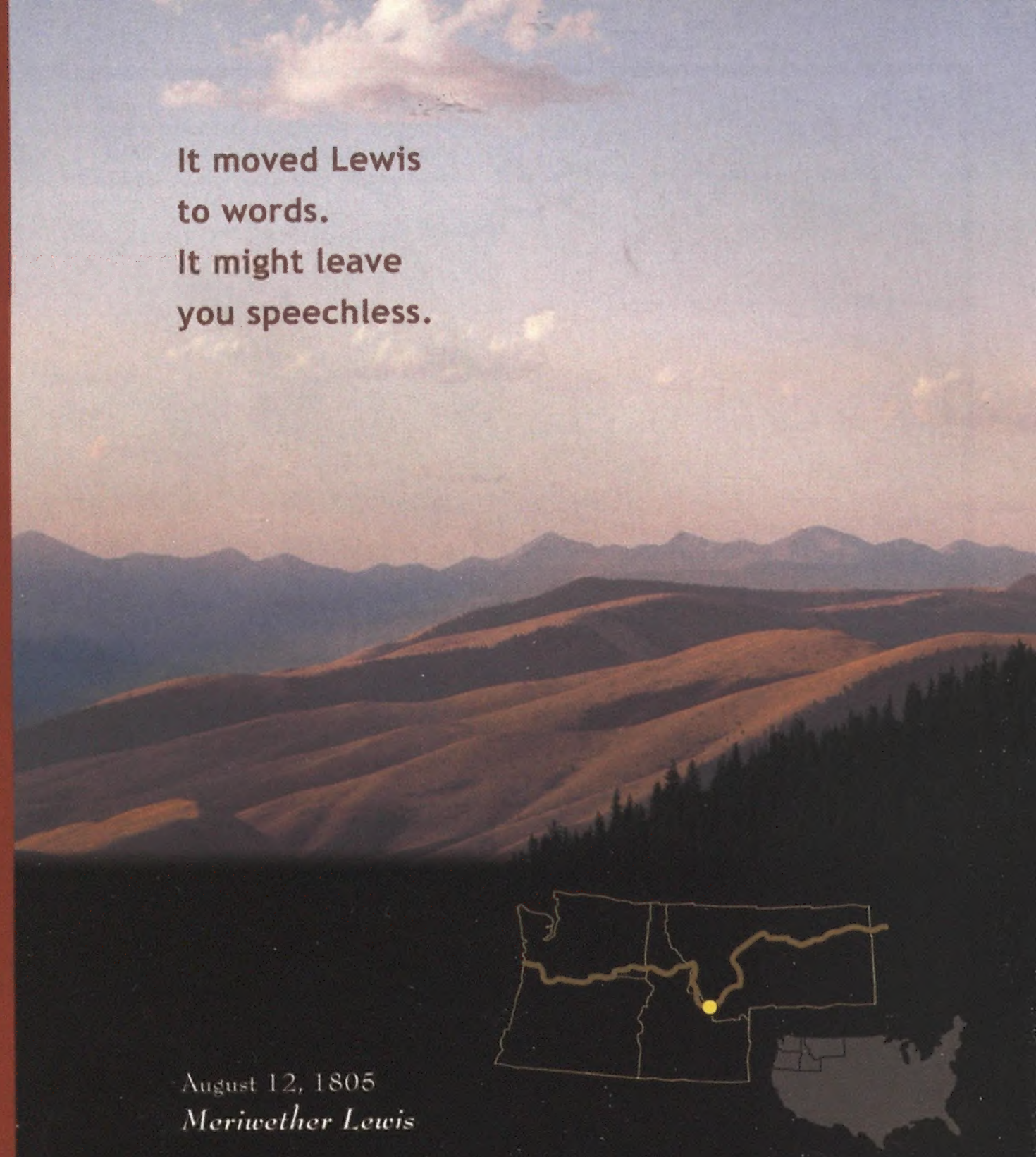
7-Nights from $1,195*
11-Nights from $2,539*
**Value Season. Call for details.*

Call NOW for Spectacular FREE Brochure

1-800-434-1232

WWW.COLUMBIARIVERCRUISE.COM

American West Steamboat Co.
2101 Fourth Ave., Suite 1150
Seattle, WA 98121



It moved Lewis
to words.
It might leave
you speechless.

You can read the
journals, books
and histories,
but the only way to
really experience the
Voyage of Discovery
is to visit it yourself.

Come, see what
Lewis saw.
Walk where
Clark walked.

While you're at it,
float a river,
dance on the beach
or spend a moment
in quiet contemplation.

Start your adventure:

www.nwlewisclark.com

LEWIS & CLARK'S
Northwest Journey
DISCOVER YOUR ADVENTURE.

Oregon
Washington
Idaho
Montana

August 12, 1805
Meriwether Lewis

...two miles below McNeal had exultingly stood with a foot on each side of this little rivulet and thanked his god that he had lived to bestride the mighty & heretofore deemed endless Missouri. after refreshing ourselves we proceeded on to the top of the dividing ridge from which I discovered immence ranges of high mountains still to the West of us with their tops partially covered with snow. ... here I first tasted the water of the great Columbia river.